

THE AMERICAN FARMER

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74th Year. New Series.—No. 25.

FARMERS, READ THIS

A Representative for You in Washington.

A Great Agricultural Paper at the National Capital.

This issue of THE AMERICAN FARMER is sent to a number of farmers for examination.

This, by many years the oldest agricultural paper in America, has been removed from Baltimore to Washington in response to a strong demand from the farmers of the whole country for a great paper at the National Capital, which should properly represent their interests in Congressional legislation and in the administration of the laws by the Executive Departments.

NEED OF SUCH A REPRESENTATIVE.

Every year it has become of more vital importance to the farmers of the country that they should have such a representative at the seat of Government. Congress is constantly considering measures of the greatest interest to farmers as a class. The coming sessions will have vast more than ever of these. The fight has now fairly begun with the effort to pass the Anti-Option Bill. The fight for free wool will soon come up in the Senate, and other measures of similar importance are on the calendars of both Houses. Powerful lobbies wielding immense amounts of money and political influence are present in Washington whenever necessary to secure the advancement of selfish interests to the detriment of those of the farmers. There are questions of great gravity arising under the laws already passed coming up constantly before the Departments for decision. Manufacturers, merchants, and importers have able agents here to watch these and secure action favorable to themselves.

THE AMERICAN FARMER will be constantly on hand closely watching all of these, informing the farmers of what is going on and resolutely fighting for their rights. It is absolutely free and independent. Its owners, editors, and managers are totally free from any political alliances or entanglements. They have none of them ever held office or been candidates. They have no friends, and will have none but friends of the farmers. Their highest ambition is to build up THE AMERICAN FARMER into the greatest agricultural paper in the country and making it entirely worthy of representing the Nation's husbandmen at its Capital.

AS A FARMER'S PAPER.

It will have no superior in the country. The best writers on agricultural topics will be employed to contribute to its columns. It will constantly contain earnest, practical discussions of every department of farm labor and management, by men who are actually engaged in making a living out of the things they write about. Believing that farming is the highest pursuit a man can follow, it will constantly do everything possible to elevate that calling, and to help farmers and farmers' wives, sons, and daughters to make the most in money, in enjoyment, in happiness, in education, and in social advancement out of life upon the farm. No pains or expense will be spared to have THE AMERICAN FARMER in each issue just what the people want to know regarding their vocation and life, and what it will most help them to the highest success.

PRICE, ETC.

THE AMERICAN FARMER appears twice a month—on the 1st and 15th of each month. It contains eight large pages—56 columns—of the best quality of reading matter, presented in large, clear type, printed on excellent paper, and handsomely illustrated. The subscription price is 50 cents a year, payable in advance. This makes it one of the cheapest papers in the whole country. The cost to the subscriber is only two cents a number, and for this low price he gets a paper that no superior anywhere, or at any price. So insignificant is the cost that every farmer in the country can afford to take it. He is sure of getting a big return on his money in every number.

WRITE TO US.

We want every farmer and every farmer's wife, son, and daughter in the country to write to us. Let them write fully and frankly on any subject that may interest them, from the best methods of handling stock to darning hosiery. Everything that is of interest in their daily lives is of interest to hundreds of

thousands of others who are doing the same work that they are doing, and meeting with the same trials, perplexities, and discouragements. They can in this way help themselves and each other by mutual suggestions and advice. We want THE AMERICAN FARMER to become the great medium of communication among all those in the country who till and depend upon it for a livelihood.

Address all communications to
THE AMERICAN FARMER,
1729 New York Ave., Washington, D. C.

PRACTICAL FARMERS.

Maj. B. F. Herrington, of Waynesburg, Pennsylvania.



THE SUBJECT of this sketch was born in Greene County, Pa., Nov. 18, 1843. His boyhood was passed on the farm. At the age of 15 he went into a store to learn the mercantile business, and when 19 years of age he had just commenced business for himself. But the war cloud now overspread the country. He promptly closed his store and enlisted as a private in Co. A, 18th Pa. Cav., at the organization of the regiment. He was commissioned a Second Lieutenant and assigned to Co. G, and subsequently he was made First Lieutenant of same company. He was taken prisoner and confined in Libby, Macon, Ga.; Columbia, S. C., and was one of 600 Union officers confined in Charleston, S. C., under fire of the Union guns, when Porter was bombarding the city. After 16 months in prison he was exchanged, and joined his regiment at Winchester, Va., where a Captain's commission awaited him. He was mustered out with his company at the close of the war.

After spending two years in Baltimore in business and attending a commercial college he returned to his old home, and for many years engaged in the mercantile business in his native town. But for a number of years he has devoted his whole attention to farming and stock raising, and probably no one has done more to advance the interest of agricultural science in his County than he has and is doing. He is a member of the State Board of Agriculture and statistical correspondent of the Agricultural Department of Washington, D. C.



MAJ. B. F. HERRINGTON.

He has been twice commissioned Major in the National Guard of Pennsylvania and assigned to duty as commissary of division on the staff of Maj. Gen. Gallagher. He has taken all the degrees in Odd Fellowship, both in the subordinate and encampment, and was the first Commander of McCullough Post, 367, G. A. R., Department of Pennsylvania. He is a Republican in politics; has represented his County in State convention.

Farmers' Clubs in England.

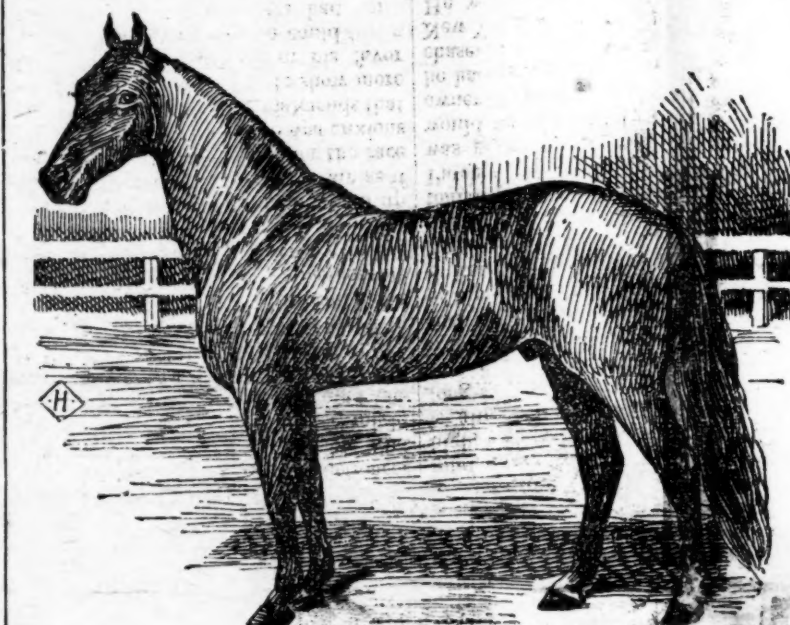
In order to compete with foreign importation of farm products, the farmers in the vicinity of Liverpool formed themselves into associations through which their produce is sold direct to the consumer, thus saving the profits of one or more middlemen. They began with fresh meat. A competent manager was engaged who had the cattle slaughtered and sold the product in shops in the center of the working population of the towns. By this means beef can be sold for from five to seven cents per pound, mutton from eight to 16 cents per pound, and lamb from 18 to 19 cents. By means of this the farmers can readily sell their meat at a price to almost defy foreign competition and the results are very satisfactory. Other products are offered in the same way with as equally good results.

STAMBOUL.

The Great Stallion Sold at Public Auction in New York.



STAMBOUL, the king of trotting stallions, was sold under Auctioneer Peter C. Kellogg's hammer, in New York City, Dec. 20, for \$41,000. It was the great event of the season, and among the participants and spectators at the sale of the American Institute might be seen all of America's great turfmen. A few days previous to the sale nine carloads of trotting horses arrived from California. Stamboul was the star of the company, and his coming had been eagerly anticipated by Eastern horsemen. He was from the stables of the late Mr. Hobart, of San Mateo, whose famous stud was kept at Whipple ranch.



STAMBOUL.

In opening his speech the auctioneer stated plainly that it was possible that the Trotting Board of Register might allow only the 2:11 record; and denounced the injustice which would refuse to recognize the mile in 2:07½ made by Stamboul on a heavy track in the face of a driving snowstorm. We quote a description of that memorable race from an account given by an eye witness.

"Stamboul came out with his head up proudly and snuffed the crisp air as if he understood that the time for the race of his life had arrived. He was anxious to go, and Maben said to his friends that he never knew the horse to show more speed. With everything in his favor Maben believed the stallion could trot a mile in 2:05, but the rain had commenced falling and the sharp wind was a disadvantage in the finishing quarter. Frank Covey expected to drive the runner, Shippee's thoroughbred, Plute John, but the judges asked him to act as time, and J. H. Crow, the driver of Electra, was selected to handle the running horse.

"Maben directed Crow to keep the runner behind Stamboul until the half-mile post was reached, when he could come up and make a hot race home. Heretofore the runner has raced the stallion from start to finish, but Maben decided to let the horse take his own clip to the half and then to take him home. Crow understood the way Maben wanted to drive the mile, but the runner could not keep up the speed and the trotter beat him out in the race.

"Stamboul was held back in scoring, and was started after one brush to the eighth pole. He came up for the start with the wonderful speed for which he is noted, and Maben gave him his head, only holding him steady. The stallion went the first quarter in 31 seconds, the runner trailing along with his legs well stretched and laboring hard. The stallion kept on apparently at the same speed, and led the runner to the half in 31½ seconds, making the half mile in 1:02½. It was a winning clip, and Maben felt that he would bear the record for the horse took hold of the work with more spirit and wanted to go. The runner managed to close up just after passing the half-mile post and made a race going the distance in 32½ seconds, reaching the three-quarters post in 1:35. The race was then desperate for Stamboul had once before covered the three-quarters in 1:35 and finished in 2:02½. Maben called on him, but urged the trotter without the whip, and the same stallion stuck his nose squarely into the approaching storm and kept up his clip.

leading the runner as he would a competing trotter. The breeze was quite fresh and striking the horse in the face it retarded his speed, as a matter of course, but Maben called on his reserve force and the game fellow responded. He was finishing at a whirlwind gait, with the rain coming down fast, making the track a bit slippery, but not enough so as to affect the horse unless it made him skip at the seven-eighths post, but he caught instantly and finished the mile squarely, covering the last quarter in 32½ seconds, and the mile in 2:07½.

Since Oct. 22 Stamboul has trotted six miles better than 2:11, and five of them were better than 2:10. In the 30 days' time from Oct. 22 the stallion lowered his record of 1890 from 2:11 to 2:07½, cutting his time three and a half seconds. Here is the record of Stamboul's miles by quarters:

Oct. 22	32	1:04	1:38	2:10
Oct. 27	30	1:04	1:35	2:09
Nov. 5	30	1:00	1:33	2:08
Nov. 10	30	1:03	1:30	2:09
Nov. 15	30	1:02	1:30	2:09
Nov. 20	31	1:02	1:38	2:07

Stamboul is a very handsome bay horse, the only white on him being his

PLOWING MATCHES.

A Plea for Making them Much More General.

BY GEO. T. FENTIS.



IN THE County of Will and State of Illinois—there has been for some years a plowing match regularly held in September of each year. More recently a ladies' department has been properly added. These "meetings" grow in interest, and the attendance runs up into the thousands. Of four agricultural papers received regularly from the same State by the writer, only one even so much as made mention in a brief item of the fact that the contest for 1892 had been duly held. Why this seeming indifference on the part of some of our agricultural sages to strictly agricultural meetings of importance? We believe they all devoted more or less space to recounting the record-splitting exploits of Nancey Hanks, while, if we remember correctly, one or two of them accorded the head-splitting encounter of bulky John and bulky Jim more attention than was given the soil-splitting efforts of Levi Stark and others.

Good plowing lies at the very foundation of good farming. It should be, and by many is regarded as an art, a science, requiring much practice, close observation, and constant endeavor on the part of the plowman who expects to attain to the degree of "expert." Some are born plowmen. They seem to possess an inherent taste for the work, and a knack of doing it well. They delight in it, while others look upon it as a groveling, tedious operation, unworthy of the best efforts of intelligent, refined men and boys. The latter view is wrong. To be an expert plowman is no small honor, and almost anyone may in this, as in other things, develop a taste and talent if he will only do his best and strive to plow each acre better than the last.

While we do not claim that the plowing match should supersede any present feature of our agricultural (?) fairs, or that it would "draw" well with the bum element or prove of very great interest to all classes of good people, yet we do believe it should have a place, and that a "diploma" should not be the only inducement for competition. It should have a liberal allowance, both as to honors and cold cash. Not only are the artisan and manufacturer encouraged to display before the eyes of an appreciative public the direct product of their skill and workmanship, but the farmers' wives and daughters are almost invariably on hand, as they should be, with a bewildering assortment of the useful and ornamental, the direct product of their own bright heads, loving hearts, and deft hands. We say give these and all useful features pertaining to farm and home still greater recognition, and at the same time encourage pap and the boys to take even more than their present interest in displaying, through the direct products of nature, the results of their labor and care, by giving them a chance to step out from behind nature and show their hand at practical field work. Not only would this tend toward better methods in the one operation of plowing, but the influence for good would be felt all along the line. When we see in the field at work, side by side, a score or more of plowmen and plowboys, each striving to prove as he never plowed before, we will see an agricultural exhibition in fact, as well as in name—one that is not merely a display of the results of skill in dealing with the forces of nature in the production of fine stock, grain, and vegetables without a word as to how such results have been reached; but we get right down to a practical scientific demonstration of "how to do it" in one of the most important farm operations, one which every farmer boy is called upon to perform, and will do better and with more interest the oftener he attends such gatherings.

Once get the boy's interest and enthusiasm aroused and it will grow on him. The spirit of improvement will possess him and be apparent in all his work on the farm. He will very soon realize that crooked corn rows, dilapidated fences, weedy fields, and poor crops do not correspond with fine plowing.

It is not long since the writer of these lines was a kid, and he knows something about boys. A wideawake boy is very apt to remember and try to do himself some remarkable thing he sees some

Two million pounds of English walnuts have been shipped from Whittier, Cal., during the past three months.

other boy or man do, be it some foolhardy caper or silly trick, or be it something good and useful. What, therefore, would be more inspiring and instructive, or more conducive to good farming, than an object lesson of the kind indicated? That it would, if properly conducted, be entertaining there is no question. Lack of interest on the part of the farmers themselves has been advanced as a reason for not giving more attention to these contests.

A lack of standing up for their rights would be a better way to put it. The management of our agricultural fairs has to a great extent passed out of the hands of practical, plowhandle farmers, and we think the lack of interest should be attributed to the present management rather than to the farmers. "Money makes the mare go" (on the race track). We have attended a number of plowing matches as plowman or spectator, and must say that this bugaboo "lack of interest" was decidedly not it. Indeed we have seldom seen a more thoroughly interested crowd of farmers than at some of these gatherings, as they surged first one way then the other along the headland to catch a glimpse along each newly turned furrow, note its merits and compare with others, the rule, "keep off the plowed ground," being frequently broken.

Farming is a progressive calling. Skillful farmers will be more sought after, and intensive, scientific field work will be more practical as the years go by.

We find also that neighborhoods in which these contests have been regularly held for years have a wide reputation for their neat, well-kept farms, farmers, and live stock, sleek, fat teams that are able and willing, under skilful direction, to do thorough, tasty field work, thus producing superior crops for intelligence, enterprise, and general prosperity.

The Papaya Tree.

The papaya tree is believed to be indigenous to the West Indies, but is plentifully found in Mexico. It has also been introduced into Florida and Bermuda. Our cut is from a photograph of a tree growing in Florida, and is a good specimen of this curious plant. The tree bears a striking resemblance to a palm, growing to about 20 feet in height, while the fruit, when ripe, looks something like an immense orange. Its flavor is usually insipid, although the product of some individual trees is very palatable. This indicates that, like the orange, it might, by cultivation, be improved and become an important article of commerce and a source of profit to the horticulturist.



PAPAYA TREE.

This tree possesses a peculiar property in which it is believed to be unique. The sap contains fibrine, which is a constituent of animal blood. So far as known, this is the only member of the vegetable world to contain this substance. This juice poured upon dressed fowls when old makes them tender, and the same result is produced upon tough beef by a similar process, or by wrapping

them in the leaves of the tree. The extracted juice of ripe fruit furnished a cosmetic. In Florida it is called a paw-paw, and it does bear some resemblance to fruit of that name common in the Ohio valley.

The Plague of Rabbits.

Rabbits were first introduced into Australia by a Melbourne squatter, who thought a pair of them would remind him of the old country. From this pair the great Australian rabbit plague arose. A single pair of rabbits can multiply in four years into 1,250,000. The cabinet of Sidney, in the year 1887, destroyed 25,300,000 of them, having spent 700,000 pounds in four years to mitigate the pest. Mr. Coghlan says that 100,000,000 acres of land have been more or less injured by rabbits.

To check their onward march a fence of 290 miles, between the Macquarie and Darling Rivers, was made at a cost of 24,000 pounds; another of 346 miles from the Murray River, northward; another of 260 miles on the southern line of Queensland; another of 340 miles from Albury to the Macquarie. But the rabbits broke through.

The number of rabbit skins exported averages yearly from New South Wales 15,000,000; from Victoria, 3,000,000, the cabinet of which Australian colony spends 15,000 pounds a year in killing rabbits. South Australia also exports 1,000 bales of skins annually, and New Zealand, on the average, 6,000,000 skins every year.

The rabbit we hear of as a serious pest in Australia is quite different from the animal we see on sale here during the season. The Australian rabbit is a persevering burrower, and it breeds with a rapidity which it is difficult to comprehend. The rabbit in this country is, in reality, a member of the hare family, and this does not apply to the jack-rabbit exclusively. That speedy animal is obviously a hare, both in regard to size and habits, and the small rabbit which is trapped, killed, and eaten, is also of the hare species. It does not burrow like the native of Europe and the unwelcome emigrant to Australia; it is much more speedy and scarce, and its flesh is darker in color and scarcely so tender. There are really no rabbits, pure and simple, running wild in America, and, to judge from the complaints from the Australian colonies, it is decidedly fortunate that there are not.

A billion and a half of cedar shingles were shipped east from Washington this year.

NEW ENGLAND TOBACCO.

The Connecticut Valley as a Tobacco Producing Section.

BY WALTER MAXWELL.



THE TOBACCO region of the Connecticut Valley embraces portions of the river bottoms extending from the approach to the Sound through the States of Connecticut and Massachusetts, and even into the southern part of Vermont. The breadth of land devoted to the culture of tobacco in Vermont does not, however, exceed 10 to 20 acres, and may be left out of consideration.

The industry of the Connecticut Valley comprehends some 20,000 acres which are under annual cultivation for tobacco raising. In round numbers, 15,000 acres are in the State of Connecticut, and the remaining 5,000 acres are distributed in chosen tracts along each side of the river through Massachusetts. Consequently Connecticut produces three parts in four of the whole of the tobacco grown in the valley.

Hartford may be considered as the Capital or center of the tobacco fields in Connecticut, and in the northerly direction, the scale of operations is maintained up to the Massachusetts line. In the latter State, the more congested and enterprising district of the industry lies between Springfield and Greenfield, with Hatfield, near Northampton, as an accepted center. All these portions of the great river valley which we have named are amongst the richest and best adapted lands in the country for the production of tobacco.

The history of tobacco culture in the Connecticut Valley, extending from 1860 up to the present date, is not without interest and some kind of instruction to those concerned in the industry. The period of the civil war was the time of a great expansion of tobacco growing in this and other tobacco regions of the United States. From 1861 the price of tobacco rose from six and eight cents per pound up to 20, 30, and even 40 cents, and, naturally, with the rise in values followed a great increase in the breadth of tobacco planted. The improvement in prices and the extent of the acreage planted were maintained up to 1871. From that year a gradual weakening of the industry set in, and falling prices led to a reduction of the land under cultivation to an extent which placed matters somewhat where they were previous to the war.

With the promise and final enactment of the McKinley Tariff Bill a new departure occurred. Men were of opinion that such alterations as were contemplated by the coming "bill" would produce changes of high advantage to the home growers of tobacco. In view of those changes greater breadths were planted in tobacco, and the production of the Connecticut Valley was increased by some millions of pounds. The calculations made by the leading men in the industry matured with even a fuller success than had been expected by the most sanguine.

The tobacco crop of 1891 came in with a scale of values altogether beyond what had been experienced since 1871. Ten cents per pound was being paid for good grades up to 1891. In the latter year general prices gradually, or it should be said almost instantly, rose to 15, 20, and 25 cents per pound; and there were very numerous examples where the values obtained were 30, and even 40 cents. With the new standard of prices a renewed impetus was given. The acreage cultivated in tobacco increased still farther, and with the increase in prices obtained in 1891 the crop, increased in acres, was of fine weight and value; so that the point occurrence of a large crop and higher prices wrought not only a great but an immediate improvement in the actual conditions and prospect of the industry.

The improved conditions obtaining in 1891 were maintained well into the current year. In conversation, however, with a man of some authority two days ago it was said, "just now we don't know where the tobacco trade is or where it is going." As a consequence of the result of the Presidential election a tone of suspension has set in, affecting the tobacco as well as other industries. The immediate effects are stagnation and a downward tendency of prices. However, there are no conclusive grounds for believing that the present slackness and weakening of values are more than momentary conditions, and that the lost ground will not be recovered. It is, however, beyond all appearance of doubt that the tobacco industry during the past and the current years has felt a stimulus and an expansion such as had not been experienced since the war period. The acreage has been very greatly increased, and not only have the positions of men engaged in the culture been strengthened and made secure, but there are notable examples communicated to us of actual small or agricultural fortunes being made.

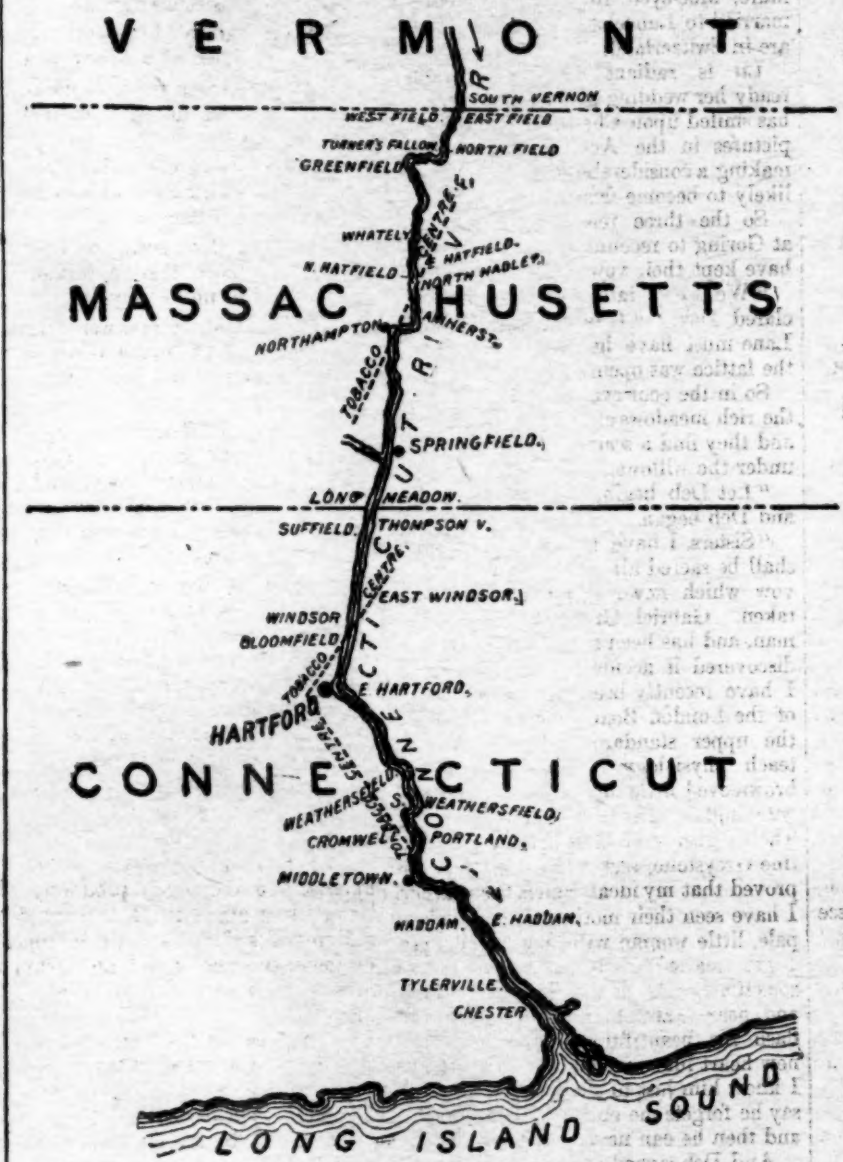
The tobacco lands of the Connecticut Valley are no longer anything like virgin soils. They have been variously cropped, and tobacco has been grown comparatively so frequently that a system of supplementary or artificial fertilization is required to keep up the standard of the crop. In the Western States, where the soil is new and abundant in the chief constituents required by the tobacco plant, a vast advantage obtains. The disadvantage pertaining to the old tobacco fields, however, is more or less compensated by the higher grade of

tobacco which the older grounds produce when the production is at a greater cost. We have before us at this moment examples of crops grown in Connecticut and Nebraska. The Nebraska crop was produced without any fertilizer, and weighed more per acre than given crops grown in Connecticut. The latter crops, however, yield a very considerable greater net value per acre on account of the finer product obtained.

Examples have been furnished to us by practical growers in the Connecticut Valley, where the cost of fertilizers per acre applied amounted to \$75. The cost of production of the crop, exclusive of the cost of fertilizers, and including manual and other labor, rent, and all other charges, was, furthermore, \$75. The total cost of producing those given crops was thus \$150. In these given examples of cultivation and production the mean yield per acre was 1,500 pounds of tobacco. If the mean price obtained for all grades were 10 cents per pound, it is seen that the value exactly equalled the cost of the crop. Now, during the years preceding 1891, seldom more, and even less, than 10 cents per pound were made. The industry was stagnant, or, as a matter of fact, falling away. The great values put upon land during the war period by the great prices of tobacco, after the war prices had fallen off, could not be sustained. Many growers who had obtained mortgages upon their small farms in order to enable them to purchase new lands were caught by the falling prices. They could not even hold their own; they were left worse than before the war.

It appears that nothing more is required than that prices should remain at the level existing previous to November in order that the current year may be found to be one of the best in the experience of Connecticut Valley tobacco growers. A conversation with an old authority in the town of Northampton brought forth the following reflections from him: "Well, tobacco is an uncommon crop to grow. It is hazardous. You know, one may get the ground into good order and have it full of manure, and that may go for nothing. The seed may be planted and not a single plant in some places may be raised. And if we get our plants, and they are planted out, then the cut worm may cut them all off, and we have to replant. Then if the cut worm leaves alone and the crop gets up, hail storms may come and riddle the leaves through until they are terribly damaged. Or if the hail passes us by, why, I've seen an early frost just double up the leaves until the crop had no further value than to plow under as fertilizer for the next year. But do you know there are years when it is no more trouble to raise a big crop of tobacco than a crop of corn. It is hazardous, and may be a great hit or a great miss. But there is big money in it when all goes well, and prices run as they do now."

The following table indicates the position of the Connecticut Valley amongst the tobacco-growing States of the Union in respect of the acreage and weight of production, but the precise importance and value of the Connecticut Valley tobacco fields is much greater than the



In given examples the total cost of production has been said to be \$150 per acre. Also that a crop of 1,500 pounds per acre at 10 cents per pound merely pays the cost of production. If that, however, is the cost of the crop, then every cent per pound above 10 cents represents a clear profit. And, during the previous and the current years, when the mean of general prices has been about 20 cents per pound, a profit of \$150 per acre has been realized. There are single instances moreover, where even as high a profit as \$300 per acre has been realized.

The two chief kinds of tobacco grown in the Connecticut Valley are the "Connecticut Havana" and the "Seed Leaf" or "Broad Leaf" as it is called. The former variety is grown to provide the main substance of cigars, called "fillers" and also "binders." The broad leaf variety is used for the purpose of making the "wrappers" or outside covering of cigars.

The "Broad Leaf" grown in the Connecticut Valley is the best of its kind produced in this country, and is only inferior to the Sumatra tobacco grown for the same purpose. The Sumatra leaf is extremely thin and fine, resembling more a delicate skin or membrane than a vegetable substance, and is purchased for wrapping cigars at a cost of \$1 per pound. A very large proportion of homemade cigars, however, are made with the Connecticut broad leaf wrappers, and the results are such as to make a warm competition with the products of Sumatra.

The crop of the current year grown in the Connecticut Valley was good, well gotten, and well cured. The early cultural season was favorable, and the preparation of the ground was accomplished at a moderate cost. The supply of plants was abundant, and the planting was done well, and in few instances required to be re-done. The growth was gradual and without interruption. No great storms of hail fell upon the leaf as it approached maturity, so that its condition was excellent—a well-developed, broad leaf and free from "holes" and "rags." A beautiful, early fall enabled the crop to be cut and "barned" with small expense and in prime condition, thus passing to the "curing" with every prospect of ad-

table suggests, because of the particular character of the products.

	Pounds.
Connecticut Valley	3,000,000
New York	4,500,000
Indiana	5,000,000
Wisconsin	10,000,000
Missouri	12,000,000
Maryland	15,000,000
North Carolina	20,000,000
Tennessee	25,000,000
Ohio	30,000,000
Pennsylvania	35,000,000
Virginia	40,000,000
Kentucky	45,000,000
Other States about	100,000,000

Russian Tax on the House Rent.

A tax on house rent has been substituted for the proposed income tax in Russia, and it is intended that the amount shall vary in accordance not only with the size and importance of the town, but with the position of the house of each taxpayer with regard to a central point. The necessity of raising money is obvious from the published returns of the expenditure during the last 25 years of the Food-Supply Guaranty Fund, which has replaced the former village grain-reserve magazines for that period with disastrous results. From 1867 to 1890, inclusive, \$32,250,000 was expended in relief; in 1891 alone the amount was over \$86,250,000; in 1892, from January to October, the expenditure was \$51,250,000. Thus the relief for last year and 10 months of the present year cost more than four times the total expenditure in the previous 24 years. The guaranty fund is unable alone to meet the demand upon it. It has received nearly \$135,000,000 from the imperial chest, which has now to be repaid. As the hamlets and villages are not to be subject to the house-rent tax, the Government apparently contemplates recovering a great part of the debt of the agricultural classes from the trading and industrial elements of the population.

Wanton slaughter of game continues in various parts of the State of Wyoming. Whole herds of elk and other game are being slaughtered, and even a number of the few remaining buffalo, supposed to be under the protection of the Government, have been shot by the so-called sportsmen. The State authorities should put a stop to such wholesale slaughter.

CELERY—COW PEAS.

Growing Celery in the South—The Cow Pea as a Fertilizer.

(Continued by the author.)



CELERY might almost be termed a semi-aquatic, one of the prerequisites to success in its culture being a moist but not wet soil. Especially is this the case in the Sunny South, where we have occasional drouths during Summer and Fall of six weeks or two months' duration. If the culturist's facilities admit of irrigation, so much the better. The plant bed and patch into which the young plants are to be transplanted must not only be in a moderately damp place, but there should be free and easy access to water, which should be used liberally, but not to excess, in time of drouth. At the same time we would caution our readers against using water to excess in very hot weather, as it tends to cause both rust and rot. After having had considerable experience in this line, we would say to those having no moist land don't try to raise celery anywhere south of latitude 32°. My own patch is on dry land; with a spring branch running through it, the water not more than 18 inches below the level of the ground. I have repeatedly tried to raise this delicious vegetable in this latitude, 33°, on high, dry upland, depending on the heavens as a source of water supply, and the well as an adjunct in very dry, hot weather; but in every instance have made a complete failure.

I will in this article try to make the matter so plain that even the novice, if he will comply with these directions, cannot fail. The celery patch should not only be put on moist land, but it should likewise be put upon clean land, i. e., land that has been prepared especially for this crop by cultivation the previous season in clean hoed crops. The reason for this is that the seed is very slow in germinating, while throughout the South the growth of weeds and grass is very rank and luxuriant; they would (if let alone too long) completely smother out such a slow growing, tiny, puny, slender, and tender plant as celery. The next item of importance is liberal fertilization. It is almost an impossibility to make the ground too rich for celery; but in every instance, and under any and all circumstances, the manure (or, better still, compost) must be well rotted, and as clear of weed seed as possible. It is but little use choosing clean land if weed seed has to be hauled out on it by the wagon load in the shape of manure. The next item is thorough preparation of the soil. The seed bed must be finely bed by the use of fork, spade, or plow (according to size of seed bed), followed with the free use of rake or harrow; in short, a perfect seed bed must be made. The seed should be sown in early Spring, say, for this latitude, 33°, Feb. 15 to March 1. Lay off drills 12 to 18 inches apart, about one-quarter inch deep; sow the seed in these shallow drills at the rate of a half ounce of seed to every 100 feet of row, cover lightly, and firm the ground by rolling or tramping with the feet. Never neglect this precaution, as without it the soil might dry out, and the seed in place of germinating would rot. Keep the ground moist by frequent watering until the seed has germinated.

Thin early, and keep clear of grass and weeds, the object being to grow large, stocky plants, and to make strong roots. Mowing the tops off occasionally, say once each month, tends to increase their stockiness; thinning out (till the plants stand six or eight inches apart in the drill) or transplanting (which is the plan pursued by myself) to same distance each tend to make the plants stockier, stronger, and finer every way. This is one very important point in celery culture, as no good, robust stalks can be obtained from weakly, puny, spindly plants. The plants must be transplanted into permanent beds, putting them in rows six feet apart, and plants 10 inches apart in row. Our plan is similar to that pursued in the North, with this exception, that transplanting must not be done till September or October. If the permanent patch is not already sufficiently rich, it can be made so by furrowing out deep every six feet with shovel plow, and placing in these furrows three or four inches of well-rotted manure, then throwing back the furrows until ready to plant. When planting time is at hand, which will be after a good rain has fallen, these furrows are leveled down and the celery planted immediately over the manure. Transplanting should, if possible, be done when the ground is moist from recent rain, but when forced to set out in dry weather, water the row freely (to saturation) before pulling up the plants; this causes the dirt to adhere to the roots, preventing excessive wilting. Transplant with a dibble, placing plants in the holes made by it; pour in water, then rake up dirt around the stem of the plant, and firm thoroughly. Water freely with strong soapuds or liquid manure every week during dry weather. To make the liquid manure fill a barrel one-third full with strong stable (or other) manure, then fill with water; renewing the manure from time to time as necessary. Plow and hoe like any other crop till cold weather, then begin to hill up to blanch. The hilling must not be done when the ground is wet, neither must it

be done in warm weather, or rust will be the inevitable result. In hilling, the leaves are gathered up in hand and tied so as to make them stand upright; the dirt is then pulled up around the plant as high as can be done without its getting into the bud. As the plant stretches up it is hilled up still more and more, as the growth requires when the soil is dry, taking especial care never to handle when wet. By Nov. 1, and thereafter (for this latitude, 33°), the earth should be kept well up to the tops of the plants, due care being taken not to cover the hearts too much. Stems not kept earthed up are likely to be injured by frost if severe. As to best varieties for the South, my own experience inclines me to decide in favor of the Dwarf, Half Dwarf, and Self-Blanching varieties, the tall kinds not having done well with me, besides being more subject to rust. For want of space must reserve its Winter care, etc., for a future article.

ON THE VALUE OF THE COW PEA AS A SOIL RENOVATOR.

All agree that peas are an excellent crop for the purpose of maintaining soil fertility, and even of renovating or building up anew exhausted or worn-out lands; but, although as stated above all are agreed on this point, I do not think that all are posted as to the actual cash value of this all-important legume as a soil renovator. Throughout the South the cow pea is a fertilizer for old and thin land, is decidedly superior to any and every other plant that will grow and thrive in that section (no exceptions being made in favor of clover). For the Middle States it is (at least) the equal of clover. In the northern tier of States clover is best, for the simple reason that the cow pea is out of its latitude, while the clover is at home. As a fertilizer for wheat, the superior of the cow pea has never yet been discovered, a rotation of peas to wheat and wheat to peas again being sufficient to bring about (without the aid of any other fertilizer) an annual increase of three bushels of wheat per acre for a series of years until maximum crops have been obtained; this in addition to gathering two crops each year of the same land. "Past experience has demonstrated that the pea vine is the fertilizer par excellence for the cane fields of Louisiana. The benefits derived from their use are manifold. Their rapid and luxuriant growth prevents that of noxious weeds and grasses, as the vines and leaves completely shade the ground and smother them out. The large amount of carbonic acid and nitrogen absorbed by them proves of immense utility to the cane crops that follow in rotation. In their decay, after being plowed under, available plant food is ready—prepared for dissemination through the soil for the use of the roots of the canes when developed. The decaying vegetable matter not only retains moisture during periods of prolonged drouth, but aids materially in rendering the soil porous, particularly where it is of an argillaceous character. Nothing yet has been found to compare with them as a recuperative agent for exhausted soils." In Florida, as well as in New Jersey, a large portion of the soil is sandy, very sandy; in short, a bed of sand. These soils are not only deficient in fertility, but they are likewise too loose in texture, with in many instances an entire absence of humus. The remedy in these instances is to completely and entirely change the character and texture of the soil. This may be gradually brought about by green manuring and applying all fertilizers in a coarse state; in short, to fill (as speedily as possible) the soil with humus, decayed vegetable matter or mold. The cow pea is the speediest as well as most economical answer to the problem. The commercial values of the vines, roots, and stubble, or rather, of the valuable fertilizing ingredients contained therein, assuming the phosphoric acid to be worth seven cents and a half cents, the potash five cents, and the nitrogen 19 cents per pound, are computed to be, vines, \$29.90; roots and stubble, \$2.67; total, \$32.57 per acre.—G. H. TURNER, Lafayette County, Miss.

The Black Spanish fowl is one that deserves attention. Few older and better farm fowls exist to-day. They lay nearly all the time, and are as hearty as the Brahma or Langshan. The fact is, too little attention has been accorded to the Black Spanish fowl, and to any farmer we can speak of no better fowls for the farm. Their plumage is black, earlobes white, with the brightest red combs; they are pictures in feathers when healthy. May more of them in their purity be seen on the farm. Partridge Cochins are pretty fowls. They are slow, but often lay quite well in Winter under proper care. The hens are very handsome; the penciling of their plumage is as accurate as if touched by the brush of the best artist. Indeed, when roaming over the fields they present a picture worthy of any farmer's attention—a feast for his eyes. They are excellent as broilers, and fatten rapidly when penned for this purpose.

The Sense of Smell in Dogs.

The sense of smell is by no means so developed in man as in dogs, cats, and other animals, but it is often abnormally keen in individuals deprived of other senses; blind, deaf mutes, for example, can recognize their friends and form an opinion about strangers solely by means of this sense. Possibly, however, animals are only sensitive to certain smells, while unconscious of others that affect us. If this be the case, they would naturally be able to follow up one particular scent more easily than a man, this scent to which they are sensitive being to them less confused with others.

Dogs are able to track their masters through crowded streets, where recognition by sight is quite impossible, and can find a hidden biscuit even when its faint smell is still further disguised by eau de cologne. In some experiments Mr. Tompkins lately made with a dog he found that it could easily track him when he was far out of sight, though no fewer than 11 people had followed him, stepping exactly in his footsteps, in order to confuse the scent.

The dog seemed to track him chiefly by the smell of his boots, for when without them, or with new boots on, it failed; but followed, though slowly and hesitatingly, when his master was without either boots or stockings. Dogs and cats certainly get more information by means of this sense than a man can; they often get greatly excited over certain smells, and remember them for very long periods.—Chamber's Journal.

An average of 9,600,000 kids are slaughtered every year to furnish a single manufacturing town in France with skins. These will make 1,200,000 dozens of gloves.



POULTRY CHAT.

Something About the Various Breeds and their Laying Qualities.

WHITE COCHINS.

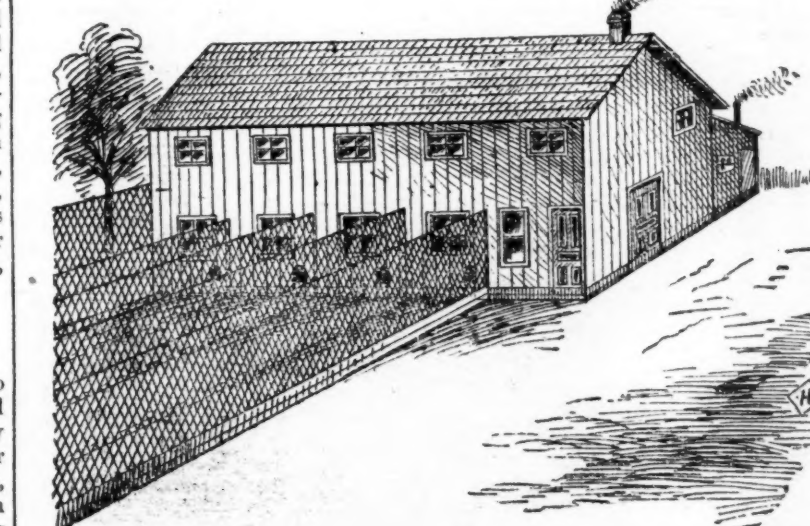
There are fewer breeding strictly high-class White Cochins than any of the different varieties of the Cochins family. It is a noble fowl and very handsome, being considered a very excellent fowl for farm use. True, all Cochins are slow in their movements and a lazy looking fowl; yet as regards laziness we have never found them so. In Winter they will lay when housed comfortably, their eggs being large and round, or nearly so, and usually of excellent flavor. They dress yellow, and in condition equal the turkey in flavor and size. Good Cochins come high; few are purchased at less than \$5 a head; many command from \$15 to \$40 a trio, and some high-bred birds double these prices. White Cochins, when pure, seem to partake more largely of the true Cochins characteristics which is so attractive to an ardent admirer of this noble breed.

LANGSHANS.

There are few better breeds than this variety, and as Winter layers few large breeds can compete with them. The Langshan is a medium-sized fowl; hens usually average from seven to eight pounds, and cocks nine to 10 pounds each. They have a clearer white, thin skin; their flesh is not at all inferior to that of a young turkey. Their plumage is not surpassed by anything in feathers. They are excellent foragers, yet bear confinement quite easily for large fowls. They attain the broiler age with the Plymouth Rock and the Wyandotte, but are not as readily marketed as yellow-legged fowls. All things considered, the Langshan undoubtedly stands without a peer as a general-purpose fowl, and to substantiate this fact is to give them an honest trial.

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A CONVENIENT POULTRY HOUSE.

Keeping more than one or two varieties of poultry seems to me a very unwise plan for any farmer or breeder to pursue. If you keep six, eight, or a dozen kinds you give attention to all, but not enough to one. One variety mastered means many years of close study and careful breeding. A reputation has then been established; it is the reward gained for sticking to one or two varieties. Experienced breeders will tell you this is the best way to breed poultry.

Grass Runs for Poultry.

In Winter in our Northern States but little indulgence can be accorded the hens and growing pullets. If the weather is unfavorable, it is wise to feed them such substitutes as will meet their necessities in onion tops. Cut clover tops and cabbage leaves, as well as other greens that can be grown easily in a hothouse, will meet their needs admirably, until the new grass comes up in Spring time. Winter weather is very trying on hens. Without green food little can be expected of the flock in laying eggs, believing that it is an essential food, and without it means a scarcity in "hen fruit." This in Winter means a great deal to the farmer who eagerly looks for profits from his flock to aid him in getting many articles in Spring time before the crops begin to yield a revenue. Look to green food, my reader, it is one secret in successful poultry raising.

Prevention Better than Cure.

EDITOR AMERICAN FARMER: Ere this we poultry raisers should have our poultry houses prepared for cold weather. All cracks should be closed. To them I give the credit of causing fowls to be troubled with roup in Winter, and also of giving them that sort of a cold which causes their eyes to become swollen and to matter. Or, as the small boy put it, to have "chillblains in their eyes."

Fowls are in danger of roup in the Fall, if the weather is cold and rainy, but there is no need of it in Winter if they are properly cared for. For the roup, I give kerosene. I give it in their drinking water, and do not measure the dose, either; for you will not find an old bird or a fopish young cock very soon what will take this drink for its delicious taste.

To feel sure they will take a sufficient dose, I do not water them the day I give them this until I think they are very thirsty, and I do not give it but every other day, for when given daily they become accustomed with the odor and will "smell the rat." Two years ago I had a valuable cock that was so afflicted with the roup that he could be heard for quite a distance when sneezing. I gave him the old reliable, dear kerosene two and three times a day. I wonder now that he didn't blaze. Then, to the disgust of my family, I sewed a flannel rag which had been soaked, or dipped, I should say, in the oil around his neck and then bathed his feet. But I am glad to say he recovered. Another very good and satisfactory way to give kerosene is to break their corn in it; either shelled or on the cob. And for the swollen head, I bathe it with a strong solution of vinegar and salt, but when the eyes become matted and closed, I use nothing but clear, warm water, applied to the eye with a soft cloth.—E. M. RICHARDS, Elmo, Wis.

A Convenient Poultry House.

Our illustration shows a very practical structure suitable for a farmer's flock of hens. It is built on a stone foundation, and all floors are raised from the ground, avoiding the dampness that is usual about an earthen floor. A hall four feet wide extends nearly the entire length of the ground floor, and on either side are the breeding pens. The fowls are fed and watered, the eggs are gathered, and all dropping boards are cleaned from the hall without entering the pens. Sliding doors, communicating with the outside runs, are opened and closed with a cord from the hall, and the windows are operated in the same manner. In the east end of the building is the egg and packing room, entered from the hall. Nearly every inch of wall space in this large room is covered with racks for cooling eggs and cupboards in which to store them. The room is heated in Winter by a large coal stove, which by



opening the door leading into the hall slightly warms the entire lower floor. Back of the egg and packing room is the cook room. It contains a cook stove, bone mill, and other appliances used in cooking and preparing food for the fowls and chicks. From this room stairs lead to the second floor, where you enter a hall running as on the first floor. On the north side of the hall are four breeding pens, with tight board troughs leading down to the yards below, thus giving each pen of fowls in the second story a good ground run. On the south side of the hall are four breeding pens, with tight board troughs leading down to the yards below. On the south side of the hall the floor is divided into an incubator room and three large brooding rooms for young chicks. At the east end of this floor is a large storeroom, and over the cook room are situated the grain and supply bins. A spout from each bin leads down to the room below, through which the grain, etc., may be drawn. This building will cost about \$500. In addition to the small runs shown in illustration each breed should have a large grass range, insuring fertile eggs.—J. W. CAUGHEY, Pittsburg, Pa.

A leading authority of the United States Agricultural Department at Washington is responsible for the assertion that there should be at least 50,000 angle worms to every acre of fertile farm land.

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OUR 74TH YEAR.

With this number THE AMERICAN FARMER begins its 74th year of active usefulness to the husbandmen of America and their families. It was for many years the only agricultural paper on the continent, and is the pioneer and progenitor of the numerous and excellent agricultural press of this country. Admirably served as the people of this country are by their newspapers generally, in no department are they better served than in agriculture. There are more and better farming papers in this country than in any other in the world, and THE AMERICAN FARMER is justly proud of the dearship of such an able and creditable corps of laborers in the greatest of all vineyards.

THE AMERICAN FARMER will no longer be content with being the oldest of agricultural papers. It will strive to be the very best. This is no small ambition, when one considers how very good the agricultural press of this country is. To make ourselves the best, or even as good as the best, requires no stinting of money or effort, and there shall be none on our part.

We have put the price down very low that every farmer may feel able to take the paper, no matter how many others he may subscribe for, and we confidently invite him to compare THE AMERICAN FARMER with other papers and pass his judgment on its merits.

In addition to being a practical farming paper, second to none, THE AMERICAN FARMER will be a staunch, reliable representative of the farmers at the National Capital, where they have the greatest need of such a champion and advocate.

Every farmer in the country should be a subscriber to the paper, and we sincerely hope that every man who receives a copy of this issue will not only subscribe himself, but call his neighbor's attention to the paper and endeavor to get them to do likewise.

A COUPLE of swindlers who have been doing business for years as F. H. Brock & Co., 123 Warren street, and John H. Johnson, 292 and 294 Warren street, New York, have finally had to suspend business, but will doubtless soon recommence their robberies under another name. Their practice was to send out circulars offering farmers an advance on the prices paid by legitimate dealers and solicit consignments. When the first shipments were small they would occasionally pay for them as a bait for others, but the shipper was certain to be victimized in the end. They got numerous consignments of butter, cheese, sweet potatoes, maple sirup, real, etc., which they sold out at whatever prices they would bring. When "F. H. Brock & Co." got into bad repute they moved into new quarters and repeated the operation as "John H. Johnson." There ought to be some way of sending such fellows to the penitentiary.

It is proper and wise for farmers to organize. It matters less what organization they go into than the fact that they go into some one. The poorest is much better than none at all. They cannot go into any without receiving some benefit. If they do nothing more than meet together and talk over their vocation they will be sure to gain something. Every one knows something which it is profitable for his neighbor to know, and no man can talk very long without giving his hearers an idea that is well worth considering.

SENATOR GEORGE made a crushing point in favor of the Anti-Option Bill when he showed that the price of cotton was regulated by men whose sales of actually held cotton were only 165,000 bales a year, but who bought and sold 40,000,000 bales of "phantom" cotton.

THE ANTI-OPTION BILL.

The very cunning attempt to defeat the Anti-Option Bill by a flank movement has come to grief. A few weeks ago Senators and Representatives were astonished by receiving great numbers of petitions, apparently coming from their constituents, asking for a Senatorial committee to investigate a combination of railroads and grain dealers west of the Mississippi to control the price of grain, and that the consideration of the Anti-Option Bill be postponed until this was done.

The workers of this shrewd scheme overreached themselves. The number of the petitions excited attention and examination. It was found that, though they purported to come from thousands of little towns, they were postmarked from a few large cities like St. Louis, Kansas City, etc. This could have been explained away by their being sent out by commission merchants in those places sending them to their correspondents in smaller places, and having them returned to them for transmission to Washington.

But another fatal defect appeared. Several Senators called attention to the fact that while these petitions purported to be numerous signed by citizens of their States, they could find few, if any, names on them that they could recognize as such. They believed that the whole thing originated in the Chicago Board of Trade, and these petitions were manufactured by millions. Senator Cockrell called the Senate's attention to a sample one purporting to be signed by A. T. Todd and 21 other citizens of Platte County, Mo. Next to Todd's signature were two from St. Louis, one from Yorkshire, England, a lady—and the others "were scattered over God's green earth." In scarcely one of the petitions sent him were more than two or three names of citizens of the Counties from which the petitions purported to come. He doubted whether these petitions had any right to be presented in the Senate and go upon the record, for they were manifestly not genuine. Similar statements were made by Senators Hoar, Daves, Cullom, Padlock, Washburn, and others.

There are a number of genuine petitions against the bill coming in from Boards of Exchanges and cotton growers, but these are vastly outnumbered by those from the real farmers of the country asking for the prompt passage of the bill.

The chances of this now seem much more favorable than at any previous time. At the time the last issue of THE AMERICAN FARMER went to press it looked as if the enemies of the bill would succeed in preventing action upon the measure. The exposure of the character of the grain combine petitions, the able speeches made by Senators George and Peffer, and the good work done by Senator Washburn, have decidedly changed the aspect of affairs, and we are now definitely promised a vote on the bill early this month. THE AMERICAN FARMER hopes in its next issue to be able to report the passage of the bill and its signature by the President.

THE Memphis Cotton Exchange has changed its mind on the Anti-Option Bill. Senator Bate has presented a memorial from that body protesting against its previous action, and praying for the passage of the Anti-Option Bill. It believes that an Exchange which actually handles 500,000 bales of cotton a year should have something like a nudge to say about the price of cotton at the New York Exchange, which only handles 165,000 bales of real cotton.

THE Deer Creek Farmers' Club, of Harford County, Md., is moving earnestly in the matter of good roads for the old Oriole State, and has issued a call for a State Convention, to be held in Baltimore, Jan. 11, 12, and 13, at the Y. M. C. A. Building. It is expected to organize a State Road League, with branches in every County, to work up general public interest in the matter, and inaugurate a movement which will result in prompt and radical improvement in the Maryland highways. So mote it be.

AN Ohio Judge has affirmed the constitutionality of the State law passed to prohibit the coloring of distilled vinegar to enable it to be passed off for cider vinegar. He held that the unwholesomeness or otherwise of the product did not enter into the question; that the intent of the law was to protect the purchaser who wanted to buy pure cider vinegar and nothing else.

THE WOOL TARIFF.

Wool growers are naturally alarmed at the outlook. The free wool advocates are confident that their opportunity has come, and that they can secure the repeal of all the duties on wool. A large number of influential papers are urging immediate action in this direction.

There will probably be nothing done this session. The House passed the Free Wool Bill last session, but it is now far down on the Senate's calendar. It is doubtful if it will be reached this session, and if it is it will not receive much consideration. There is a decided majority against it in the Senate, and there will be little temptation for the free wool Senators to make elaborate speeches on the matter, as they know it will all have to be done over again in the next Congress when the question will come up for serious action. The Free Wool Bill of the present Congress may therefore be regarded as practically dead, and deserving no further consideration.

What the next Congress will do may well be the subject of lively apprehension. The assault on the wool duties will begin promptly, as soon as the new House is organized, and there will be a struggle among the flockmaster's enemies to see which shall lead in the attack.

While the outlook is dark, we are far from believing it as hopeless as many think. The farmers of this country are not such idiots as to sit idly by and see one of their greatest interests slaughtered by hostile legislation, while other businesses of far less magnitude and importance to the Nation enjoy the benefits of protective laws. The 45,000,000 sheep of the United States are owned by over 1,000,000 voters, who are men of more than average intelligence and force of character. They are men who make their influence felt, when once roused to action, and when the fight begins in earnest the politicians will hear from them in no uncertain way. They did not show much interest in the matter during the free-wool debate last Spring, because they felt that the speechifying and voting then was largely for political effect during the coming campaign, and no such bill as was proposed and passed could get through the Senate. Now, they will understand that the danger which confronts them is real and imminent, and that they must do something effective to ward it off. We know that they will. The Representative or Senator who speaks and votes for free wool will know that he will have in account to settle with his sheep-raising constituents, and this thought will "give him pause."

We urge the wool-growers to begin active preparations for the struggle which is sure to come. They can prevent legislation which will destroy the value of their flocks and seriously reduce the profits on their farms if they will act promptly, decisively, and in unison.

THE AMERICAN FARMER will lead in the fight against any reduction whatever of the duties on wool. It firmly believes that these should be higher, rather than lower, and that for the good of the whole country we should have hundreds of millions of sheep, instead of the 45,000,000 we now have. We ask all who are interested in this great question to rally around the standard of THE AMERICAN FARMER. It is right here on the ground where the mischief is being planned, and it will watch every step in the movement, and keep the wool-growers carefully informed as to what is threatened and what is done, who are their reliable friends, and who are their enemies—covert and open. The paper should be in every wool-grower's hands this year, and we trust that not one will fail to subscribe for it.

No part of the country will be benefited quite so much by the construction of the Nicaragua Canal as the South. It is strange, therefore, to see so much opposition to the project from that section. It will at once make Galveston, New Orleans, and Mobile great seaports, and improve all the places on the Gulf Coast.

Get up a Club for THE AMERICAN FARMER.

THE Vermont Grangers are not at all satisfied with the conduct of the State Agricultural College, and they seem to have reason to be. Though the college is fairly well endowed, it has only eight students in the agricultural department proper, and has never graduated a student since its establishment in 1865.

ENGLISH AGRICULTURAL DEPRESSION.

ENGLISH papers, and especially the agricultural papers, are far from pleasant reading now. They have column after column on the depression in all branches of farming, resulting from competition with American, Australian, and South American products.

Some interesting figures were recently presented in a circular from the Central Chamber of Agriculture, referring to the great decrease in the price of products since 1871. These show that in the last 20 years the price of the grain produced in the kingdom has fallen \$110,000,000; the market value of the potatoes has fallen \$35,000,000; of turnips, mangolds, vetches, etc., \$7,500,000; of clover and hay, \$85,000,000; wool, \$35,000,000; of meats, \$105,000,000—altogether a fall of \$377,500,000. The value of the farming stock had declined similarly. Horses average \$10 apiece less than 20 years ago; cattle, \$17.50 less; sheep, \$2.50 less; and swine, \$1.25 less. The total diminution in the annual value of the farmers' products is put at \$705,000,000. This loss falls first on about 9,000,000 people engaged in farming about 48,000,000 acres, thus making a reduction of \$8.09 in the yearly earning capacity of each acre, and an average reduction of \$78.33 in the yearly income of each of 9,000,000 people engaged in agriculture. Assuming these to be in families of five, it would make the average reduction in each family's income of \$391 a year. Where so many of these families live constantly on the narrow margins above want, such a reduction must bring dire poverty to great numbers.

ONE sharp public lesson of Jay Gould's death is the necessity of legal regulation of the manner of disposing of great estates. The founders of our Government wisely abolished the evil of primogeniture in land ownership. Now we are threatened with a similar evil in regard to personal property. John Jacob Astor set the fashion among millionaires, by giving the bulk of his fortune to his eldest son and allowances to the other children. His object was to build up a great family name as a monument to himself. Cornelius Vanderbilt followed his example. In spite of the immense wealth which he accumulated, he found himself despised as a parvenu by the aristocratic Astors, whose wealth was a generation older than his. He resolved to found a family of wealth, and late in life picked up his eldest son, whom he had always despised and whom he had suffered to plod along for 45 years as a commonplace farmer on Long Island. He put William H. at a desk in his office and ordered him to learn the business under penalty of disinheritance. William was duly obedient, and was rewarded for it by being given the bulk of the old Commodore's fortune in trust for his son, who was to transmit it the same way. This order has been as faithfully followed out as was the will of old John Jacob Astor. In time, Jay Gould found himself looked down upon by the Vanderbilts and Astors as a vulgar newcomer, and he has followed their example by giving nearly all of his property to his eldest son in trust for his eldest son. The other members of the family are put off with allowances. In this way great families are being built up in this country which must become as great an affliction to it as the titled aristocracies are to those in Europe. The remedy would seem to be a law compelling an equal division of property among all the heirs, which would give a greater chance of a redistribution of wealth to the whole people.

In the opinion of Representative Hatch, of Missouri, the sugar bounty is doomed. He says that the Democratic party is pledged to repeal it. He favors substituting a uniform duty of one cent a pound on all sugars imported. Republican Representatives oppose the one-cent-a-pound tax, which they say would at once stop the production of every pound of sugar in the country, and is a move directly in the interest of the big sugar refiners.

It is now estimated that the total production of wool in the United States for 1892 was 332,000,000 pounds in the grease, 144,700,000 pounds scoured, or an increase of 25,600,000 pounds in the grease, and 5,400,000 pounds scoured over 1891.

Ask all your neighbors to subscribe for THE AMERICAN FARMER.

HURRY up with that cotton-picking machine. The inventor of a really successful one can at once move into the same neighborhood as the Astors, Vanderbilts, and Goulds, have his steam yacht, his Winter residence in Florida, and all the other consequences of a bulging pocketbook. The cost of cotton picking is constantly increasing in the South, and the machine must come to the help of the planters, just as the self-binder helped out the wheat growers.

CHICAGO people who have vivid memories of the little ivory toilet article with which their mothers searched their youthful heads are much tickled over a grocer's advertisement which reads:

FINE COMB MONEY FOR SALE.

STOP this sneering about women never inventing anything. An English woman has found out that by smearing the inside of a horse's hoofs with soap the trouble of baling with snow is almost entirely removed.

EVERY business in the world is making rapid progress, which means radical changes. Farming is no exception. The successful farmer is the one who keeps up with the times. To do this he must read and study unwearyingly.

If you want complete and reliable reports of what Congress is doing, trying to do, and intending to do with reference to the interests of farmers, take THE AMERICAN FARMER.

BUREAU OF INFORMATION.

H. H. Flak, Tehama, Ore.—The New York Board of Health says that carbolic sublimate, in the strength of 64 grains to the gallon of water, is the most effective of the germ-destroying agents. Carbolic acid comes next, employing 24 grains to the gallon; next, bromine, one ounce to 11 gallons; permanganate of potash, one ounce to about 11 gallons; chloride of lime, four ounces to the gallon; sulphate of iron, one and a half pounds to the gallon, and, last, in point of effectiveness, sulphate of zinc, two ounces to the gallon.

J. O. Belcher, Taunton, Mass.—The guinea is an African bird, and probably derives its name from first being brought to Europe from the Coast of Guinea. It is also called the "pintado" in many sections.

Mrs. Bella Beach, Fayetteville, Ark.—Probably the best preparation for cleaning picture frames and restoring furniture is a mixture of three parts of linseed oil and one of turpentine. If this is put on with a wooden rag, and when dry rubbed with another wooden cloth, it will not only remove the dirt and scratches, but restore the wood to its natural color and give it a polish.

Henry Hunt, Belleville, Ill.—The old-fashioned way of making ink, which produced an article that was first brought to Europe from the Coast of Guinea. It is also called the "pintado" in many sections.

Bobbie Shatto, Glen Alpin, Wis.—People who have a dog that is very dirty, and who are tired of cleaning him, may wish to wash him with a solution of carbolic acid. A solution of carbolic acid, and then follow this with a washing with soap.

Jas. Andrews, Pineville, Ky.—Both cholera and typhoid fever are purely "dirt diseases," and their existence implies the existence of dirt in the patient's surroundings. The most common cause is drinking water which has become fouled by discharges from the bodies of those afflicted with these diseases. To avoid this drink only pure water. If you have any doubts about the water, have all that you use boiled before drinking it.

Burns Holman, Lothrop, Ind.—With some lumber, nails, a hammer, saw, and a two-foot rule you can readily make boxes which will accurately measure your stuff. A box eight inches deep, the sides 16 inches and the ends 16 inches, will hold just one bushel, and each inch in depth will hold four quarts. Or you can make your bushel box 11-1/2 by 24 inches and eight inches deep. In this, also, each inch of depth will hold four quarts. The idea is to get 2150.4 cubic inches, which is the legal standard bushel. You can measure your corn-cobs and wheat bins by reducing their dimensions to inches and dividing this by 2150.4, which will give the contents in bushels. A quart is 67.2 cubic inches, and the gallon simplest in a box 4 by 4 by 41-1/2 inches.

NEW PUBLICATIONS.

THE AMERICAN SHIRE HORSE-BOOK. VOLS. I, II, AND III. Published by The American Shire Horse Association. Edited by Charles Burgess, Secretary, Verona, Ill.

The American Shire Horse Association can well afford to be proud of its stud book, and more so of the man who has compiled the three volumes. Bound durably, and printed on excellent paper, they make books which horsemen, especially those who have Shires, should not be ashamed of. The total number of animals registered in the three volumes is 2,923, but it is not so much the number as the record of many of the registered animals. The volumes are splendidly illustrated, and the pictures have been selected from animals recorded, which have been prize winners in America, and they are presented as representatives of good Shires. In Vol. I a complete history of the Shire horse is given, and this is followed by a well-written article from the pen of George F. Brown, Aurora, Ill., on the first introduction of Shire horses into America, and the effects of their cross of the native stock. The origin of this breed, like that of most others, it is impossible to trace, but the best authorities on the subject agree in the opinion that the breed is substantially the same as existed in England over 200 years ago, some writers claiming it to be directly descended from the war horse used in Britain at the time of Julius Caesar. However, whatever may be the origin of the breed its history in America is well known, and it can be well said that under the guidance of the American Shire Horse Association there is no fear of the excellent merits of the breed being undervalued.

The Tennessee Journal of Meteorology is a paper devoted to the interests of the farmer, and is published at Nashville, by J. B. Marbury, and the subscription price is 25 cents per year.

EUROPEAN AGRICULTURE.

The Disastrous Effects of the Panama Canal Swindle.

Special Correspondence THE AMERICAN FARMER.

PARIS, DEC. 12, 1892.

Recent revelation of the terrible "scandal burst" about Panama is already telling severely on the agricultural interest. The frauds, amounting to nearly \$250,000,000, have been committed principally at the expense of the small peasant proprietor, who bled himself white as well to obtain cash to purchase a share in the Panama bubble that the drummers assured him would bring him in 20 to 30 per cent. on the money he plunked down. He borrowed a portion of the purchase-money and exhausted all his savings to make up the remainder. It should be remembered that the French peasant buys his parcel of land generally on account, redeeming the price and the running interest by instalments, the latter made up by wages and the produce of the allotment. And he will continue to scrape together the cash during his lifetime to hold on, and when he dies the mortgage puts in his claim before the natural heirs.

In this handicap condition the small farmer plunged deeper into liabilities by investing into Panama Canal shares, and the latter now are not the value of even waste paper. Not only is the borrower hit, but also the mortgagee himself, who can find no purchaser for the land nor tenant for its cultivation. On both sides the sickly hope was looked forward to that the foundation of the great National rural bank, favored by the Government for assisting the 520 agricultural syndicates, would bring relief to the "cornered" cultivator. This relief must be relinquished; the State can vote no special capital to aid invalidated agriculture, no more than it can those other depressed industries that have formulated also their demand for help from the National milk cow.

Then again the revelations of the Panama scandal have so shaken the confidence of the Nation in the integrity of its public men, so that no Government which may be formed will have the necessary influence and authority to carry to a solution the numerous social reforms intended to lighten the burden of taxation on the land, and to remove difficulties in the way of reducing the imports on agricultural produce. For example, there is a large extent of reclaimed land that since 30 years has escaped taxation, and there are thousands of acres whose value has been augmented three hundred fold by the railway system, are still taxed at rates or valuations that ruled before a railroad was constructed. The industrial cultivation of the potato for the production of alcohol promises to be a veritable bonanza for France, as it has proved for Germany. The culture of the tuber in the season just expired indicated immense strides in this direction. The coming year will see a greater impulse imparted to the "tuber boom." But the Minister of Finance has not been able to carry out his projects for the rearing of the home alcoholic taxation, still less to thrash and winnow the startling scheme to levy the entire taxes of the Nation on alcohol alone, the Government securing the monopoly of the product as it does in the case of tobacco, stamps, lucifer matches, etc. That reform would permit cultivators to embark in potato culture remuneratively. From 10 to 14 tons of potatoes—variety, the Richter Imperator—have been obtained per acre and sold to the fecula manufacturers. The return has been twice as remunerative as either cereals or beet. Despite the heavy import duties levied at present, it is Germany that supplies France with cheap potato whisky to give body to weak wines and to fortify blendings for shipping.

The French Government, unable to suppress horse betting, as is known, sanctioned the gambling on the racetracks, the stakes to be paid into official bookkeeping offices, and the total of the receipts of each book to be divided *pro rata* to the successful backers after the Government deducted a three per cent. commission, the moiety for charity, the other half to be paid to the Minister of Agriculture to encourage horse racing and ameliorate the breeding studs. The Government, not being able to pay \$5,000 to \$8,000 for a pure English-blood sire, has allocated \$30,000 to a commission, whose members are to travel through Syria and pluck up Arab stallions on the spot, at \$600 or \$800 each, and ship them to France to cross native mares, leaving the world to conclude the progeny will be of the same blood as the English saddle horse. If a breed of horses could only be created in that way, the extraordinary circumstance about the project is that professional men have been found to encourage the chimera. It requires many years, with favoring accessories of climate, dietary study, and training to bring out the points desired in the betterment of stock, let alone the more difficult matter of equine amelioration. Further, the experiment has been already tried in France and failed. In the southern part of the country the Araby steeds from Algeria prevail—first race scrub, out of which nothing has been or ever could be made.

Another society is in course of formation to reclaim waste land and stock it with American vines. The society, already in existence, confines itself to replanting abandoned vineyards, where the phylloxera has done its worst, and requires only the free right to the land during 20 years, when the vintner will re-enter into possession. If a vineyard commences to pay from its fifth year of planting, the speculation ought to be remunerative.

The absence of commercial conventions between France and neighboring states is producing more than ever confusion. The wine mixers of Bordeaux require thousands of hogheads of Spanish wine to manufacture clarets for English exporters, and the farmers of eastern France demand that no impediment be placed in their way to stocking their dairies with milk cows from Switzerland. Now, these questions are in the position of Mahomet's coffin. The more meat importations from the United States augment the more the price of retailed plain joints, steaks, chops, and even bacon, increases. But the farmer does not gain one red cent benefit from the rise. Since the tax on foreign cereals, chiefly of American origin, has not caused any elevation in home market prices, agriculturists have been puzzled. The customs tax, perhaps, if abolished might be tried again to give backbone to wheat growers.

The experiments conducted last year respecting the culture of mixed wheats have proved satisfactory. Millers support the practice; generally a white or a yellow wheat is mixed with a red grain; the more silicated stem of one variety will sustain the softer stalks of the other. Fruit farming is extending, and so is that for the field culture of garden vegetables. The employment of fertilizers along with barnyard manure has proved highly successful. In the kitchen gardens round the metropolis commercial manures are gradually superseding that of the farm. In the cider districts of Normandy the trees, cared and dosed with mineral fertilizers, are doubling their yield, in addition to an improvement in the quality of the fruit.

A marked improvement is recorded in the output of butter since dairy farmers unite to form companies to work up their milk by all the known improved processes. These companies now secure trained instructors in the preparation of butter and cheese. The Government has also its teachers traveling from one dairy center to another, inculcating modern notions in the handling of dairy products. In the case of Bretagne, its butter has risen two to three cents a pound in consequence of cleaner preparation. But if Canada obtains exceptional conditions from France respecting her cheaper and richer cheese, native makers will be up in arms. It is but right to add that in France all Canadian, all Chester, all Dutch cheeses are believed to come from America.—GREVY.

Brazil is Land Poor.

As every school boy knows, Brazil has about the same area as the United States, but with her something more than 3,200,000 square miles of territory she is "land poor," having, by the largest estimate, barely 12,000,000 inhabitants. Only about one-third of that number are "Aryan," or people with a considerable proportion of white blood in their veins, and in this enervating climate it requires unadulterated Anglo-Saxon grit, industry, and perseverance—not, as in the temperate zone, to make the land yield anything, but to cope with and keep down the surprising energy of nature. And—heaven be thanked—the North is not yet so crowded that Anglo-Saxons need tackle the tropical jungles and consort with serpents and savages to make a living.

As now known to the commercial world, Brazil is looked upon as a comparatively narrow strip along the Atlantic Ocean, running from French Guiana, a few miles north of the equator and the mouth of the Amazon, to Uruguay, 30 degrees south of the equator. All the rest of the vast Republic, except a little strip along the river margin, is unbroken forests, backed by mountain ranges, and what lies behind the mountains no civilized human being knows. At least one-fifth of Brazil is yet as complete a terra incognita as the heart of Africa without a Stanley, and one-third is untrodden tropical jungle, in which white men could not possibly live during a greater part of the year—where huge snakes, and wild beasts, and venomous insects abound, where everv bush has a poisonous thorn, every flower a deadly fragrance, and every creeping and flying creature a dangerous sting. The great river and its affluent drain an area of 2,300,000 square miles, and the annual inundation is more wonderful than that of the Nile. If the flood comes suddenly the traveler, drifting safely along mid-stream in one of the regular steamers, may see trees occupied by enormous serpents, beasts, and birds; all hostilities temporarily suspended between natural enemies by the common peril of the deluge.

The Industries of Paraguay.

The Republic of Paraguay has recently sent samples of the products of that country to some of the Consulates in Europe for exhibition. These museums are established for the purpose of making known the exportable products and those which may be cultivated, but the growing of which has only been carried on on a small scale. Among the exportable products are timber, of which 22 different kinds are shown, and tobacco. Samples of native rice, coffee, caraguana, sugar, and rum are also included in the articles on exhibition.

A Curious Spring.

Three miles north of Aurora, in Albany County, Wyoming, a stone bluff rises abruptly from the plains to a height of 600 feet. Thirty feet from the ground the rock has a torn and jagged appearance as if it had been struck by lightning. From the clefts thus formed there gushes forth a spring, or springs, of magnificent water, the volume being quite large.

A beet sugar factory to cost \$200,000 is to be built at Fairfield, Wash.



Polly.

She didn't shine at college.
Has little school-book knowledge.
Can't parse or pose in Grammar.
Can't wield geologic hammer.
Knows nothing of astronomy.
Political economy she despises.
Greek, Latin, mathematics.
Still less of social statics.
She's green in Brownology.
Half beastish in theology.
She makes sharp witticisms
On her higher criticisms.
On never studied botany.
Grand facts she hasn't got any.
She isn't stuffed with art conceits.
Nor puffed up with their counterfeits.
In short, she's just a jolly
Model helpmate in my Polly.
Not a pedant, nor a shooing.
Stuck-up frump of a blue stocking.
But a clever little woman.
And so gloriously human.
Born to cheer me all through life;
That's why Polly is my wife.
—Baltimore News.

What a Woman Can Do.



ANY women, especially housekeepers, are disposed at times to become discouraged and grow faint hearted at the prospect of a life monotonous with the daily rounds of homely duties. They sometimes lose sight of the fact that routine is an equally important factor in the life of every working man. They forget in these dubious hours the amount of good it is possible for them to do if they are in earnest with life.

Every woman, however busy, may find time to make life a little sweeter to those around her by concentrated effort along certain lines. She may take up some simple accomplishment, some definite course of reading, giving to it only "odd moments," and thus make her home and herself more attractive to her family.

To show what it is possible for one woman who is enthusiastic to accomplish, attention is directed to the work of Mrs. Ernest Hart, carried on among the starving Irish peasantry of Donegal.

Nine years ago, while making a jaunting tour of that district, she was very much impressed by the fact that the peasants never asked for money, but always for work. She put on her thinking cap, and before long a solution of the problem presented itself. Why not encourage these people to improve upon their native arts and develop new ones? She immediately sought customers for home-made socks and gloves. She found teachers who would go to their cottages and teach them the better use of their wheels, thus stimulating into life the old industries of spinning, weaving, and weaving.

An investigating trip to Scotland gave her some ideas of the uses of home dyes. She immediately began experiments in her own laboratory, and after many failures at last succeeded in ascertaining definitely how the native heath, heather, and leather might be used to produce fast and invariable colors. Again, teachers were sent the rounds to all who cared to learn.

Other women became interested in this great work and offered their services. Two ladies were sent to Oxfordshire to learn torchon and pillow lace making, to return and go from house to house to teach the women and girls this finer art.

By never tiring energy Mrs. Hart has been able not only to teach them these useful industries, but has also been able to find customers for their wares.

Gradually in these nine years the work has increased until now among the industries are numbered those of spinning, weaving, dyeing, clothes making, tailoring, cloth manufacturing, carpentry, wheelwrights' work, sewing, lacemaking, sprigging, and embroidering. Each one of these arts is founded on knowledge drawn from scientific experiments. In every case the peasants are taught technical work so as to command the highest prices for their goods.

During the last two Winters no less than 4,700 lessons have been given each season. It is estimated that over \$100,000 are now paid annually into Donegal.

Mrs. Hart has received a concession to give an exhibit at the Columbian Exposition, and it promises to be one of the great attractions at Chicago next year. The display will consist of an Irish village. Conspicuous among the little cottages will be a fac-simile of Donegal Castle as it exists to-day in its semi-ruinous condition. Each cottage is to represent the industry of one country, and in each will be peasant boys and girls, in native costume, at work.

Editor's Chat.

I WONDER how many of you have ever read that beautiful prose idyl by George William Curtis, entitled "Prue and I." Long ago, when it first appeared, I read it with intense pleasure, and to-day my enjoyment of its pages is as keen as ever. Its sentences flow along as smoothly as the deep river glides upon a Summer's day, and there is music in every rounded period. But the charm does not all lie here. Beyond the beauty of style is the beauty and purity of thought. Dear, quaint Prue becomes a living personality to us, and the "I" who is talking is a real human being whose portrait, self-drawn, shows us "the garments with their shining knives and carefully brushed elbows; my white cravat, careless, yet prim, my meditative movement as I put my stick under my arm to pare an apple"—as vivid to us as many another who walks in our sight day by day.

Underneath all of this description of journeys in Spain, which, as you know, is only another name for the castle building in which we all sometimes indulge, are many lessons that learned would help to make life easier. One of the principal ones is to make the best of everything as it is, until we see some way of changing what we do not like. He, this gentle old man who is the "I" that with his Prue lives and loves and enjoys everything which he sees that is fair and beautiful, even though he is old and not rich in this world's goods, gathers flowers where the restless and discontented only pluck rue.

I do not think there can be anything sweeter or more tender than this about the swift moving of the years:

"For the years pass like Summer clouds, Aurelia, and the children of yesterday are the wives and mothers of to-day. Even I do sometimes discover the mild eyes of my Prue fixed pensively upon my face, as if searching for the bloom which she remembered there in the days, long ago, when we were young. She will never see it there again, any more than the flowers she held in her hand in our old Spring rambles. Yet the tear that slowly gathers as she gazes is not grief that the bloom has faded from my cheek, but the sweet consciousness that it can never fade from my heart, and as her eyes fall back upon her work again, or the children climb her lap to hear the old fairy tale my wife Prue is dearer to me than the sweetheart of those days long ago."

Ah, would that there were more who could sing this sweet song of "Prue and I," breathing so much of love and harmony; of a love that is of the spirit and not of the body; love that knows no change though the eye grows dim, the cheek pale, and the step falters; love that survives all trials, all changes; then, indeed, old age would not wear the aspect of terror that it often does now.

The way in which he consoles himself because "Prue and I" were not invited to a grand dinner not only calls a smile to one's face in reading, but it teaches its gentle lesson as well. Even though he may not sit down with the dear wife at the table sparkling with its array of glass and silver and china, and loaded with tempting delicacies, he finds compensations in that he does not have to suffer the inevitable annoyances that come to the dinner-out. In other words, he shows that the things so long for and believe would add so greatly to our happiness are rarely, when obtained, if they come to us at all, what we imagined they would be. Little things which do not enter into our thought of possibilities shadow the realization and spoil the enjoyment.

Yet it is not meant that we should sit down contented with just what is, and make no effort to advance to what we wish for and dream about. It is only that these castles in Spain which we build and desire to live in are never so beautiful as they seem in the distance.

And this exquisite prose idyl teaches another thing, too—that around us, perhaps in our own houses, may be heroes and martyrs, only not being introduced to us with the blare of trumpets and the sounding of cymbals we do not know them. It is certain, though, that the life we call wasted is often the fullest of accomplishment, for it is full of duties done, and no matter how homely they may be, the Infinite God placed them according to design and to carry out His purposes.

We noticed that a highly esteemed contemporary in the Dec. 10 edition makes this statement: "You can't make jelly out of green fruit." Much as we dislike to differ with our friend, we cannot refrain from saying that the brevity should read: "You can't make jelly out of ripe fruit." When we stop to consider what ripe fruit is and the difference between its chemical composition and that of green fruit, it is perfectly plain that our friend said "green" when "ripe" was intended. As soon as fruit is ripe decomposition is already there. In other words, the cell walls are broken down, and we are unable to extract the juice without getting more or less of the fiber also. Anyone who has had experience in jelly making knows that ripe crab apples or ripe grapes cannot be made into jelly that will set unless a very considerable proportion of green fruit be added. The extracted fiber of ripe fruit is what makes our jelly turn out to be sirup.

Fall and Winter Fashions.

Do we really want short dresses and comfort? Or, is there a fascination in the trailing skirt, with its swish-swish as its wearer walks, that makes the inconvenience and dirt fade into the background of the consciousness? Anyway, the reign of the long skirt is still upon us, and we suffer, but fall into line all the same. Those worn upon the street are just long enough to serve as sweepers. Even when they make a pretense of being short, they remain of a length to compel lifting when walking unless they are to be ruined.

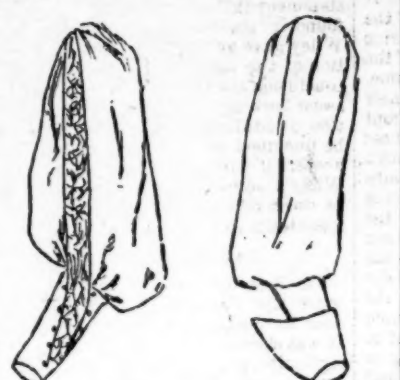
Skirts are still made very plain and fitted carefully, although there is a little tendency toward more fullness than during the Summer. In fact, there was an attempt to revive paniers, but it failed entirely.

Sleeves are yet worn large above the elbows, in some cases we are told measuring a yard around. It is needless to say that there can be no beauty in an exaggeration of this kind. Velvet sleeves are used upon all kinds of gowns, whether for indoors or the street. If well made they always add elegance to the costumes.

The two sleeves represented in the cut are exceedingly pretty. The first is made of cloth with an insertion of a heavily-braided band of another color, or of a plaid velvet. The second has the gauntlet cuff which is greatly liked by many people.

The newest and most fashionable wool materials have a rough surface, not pretty at all, and yet seeming to be popular. Corded goods are also worn a great deal, and repped materials.

In silks, bengalines are still in favor. Plaid silks are very stylish and are used in some handsome gowns in combination with wool goods. Broadened silks are also quite popular. Black silks made up with white revers and cuffs are worn by elderly ladies at receptions. For dinner parties and receptions at home, the young ladies of the family may wear bright-red gowns.



A very handsome misses' suit consists of dark-red flannel dress and cloak both bordered with black fur.

The favorite combination at this season is hunter's green and violet.

Children's costumes are simple as usual this year. Large sashes tied singly under the arms are popular for the little folks.

WORK FOR BUSY FINGERS.

Some Pretty Things for Making the Home Attractive.

SHOE PENWIPER.

Take a baby's shoe of red kid. Cut out four round pieces of black cloth, each three inches in diameter; pink the edges and fold them together twice, then push the pointed ends into the toe part of the shoe so the pinked edges of the cloth may project at the top, so the pen can be easily wiped upon it.

PANSY PINCUSHION.

Cut two pieces of cardboard in the shape of a pansy. Cover one side of one with bright yellow silk and one side of the other with deep purple velvet. Then outline on these with yellow and dark-red silks long lines and close stitches in the center so as to make them look like pansies. Then overhand the two pieces together, leaving a small place, and stuff this full of worsted, pressing it down to make it as hard and firm as possible. After it is filled sew up the opening.

An Evening's Entertainment.

After the holidays are over and we are again settled to everyday life we shall look forward to a few months of home enjoyments around our own or a neighbor's fireside. The evening's entertainment may be planned with no expense and very little trouble, in which both old and young may enter. This is called a "covey party." Before the guests come the hostess has the webs all prepared, and as soon as all have arrived the fun may begin. As many pieces of linen thread as there are guests are measured off 10 yards long. These pieces are of two colors, one for the ladies and one for the gentlemen. On both ends of each piece of thread is a drop of red sealing wax, so that no mistake can be made as to honesty of the "returns."

All of the pieces start from one point, perhaps a hanging lamp in the center of the room. From there they are taken separately to a picture nail around a table leg into the next room and back again; indeed, into every conceivable place. Of course the threads will cross frequently, and at such crosses John and Mary are apt to find knots which will not untie. At a signal from the hostess each one chooses a thread and starts out to find the waxed end. It requires no small amount of patience and dexterity to untangle your thread without breaking it. The person who is lucky enough to find the waxed end is given a prize, and so on the second and third. It is falling out of custom to give "booby" prizes, but instead some little trifle may be given to the three first successful hunters as a remembrance of the evening.

About Window Gardening and Other Things.

A great deal of care is necessary in potting and repotting plants. Many times they are killed by carelessness in taking them up. One of the worst things to do is to catch the pot up in one hand and run a knife around the inside in order to loosen the earth. The knife cuts off the fine-feeding roots that are on the outside. If the soil is dry turn the pot upside down upon the left hand, strike it smartly with the right hand, and usually the plant will slip out. Should you wish to remove the old soil for any reason, set it in a dish of water and move it back and forth very gently until it is washed out sufficiently. Then take a pot only one or two sizes larger than the one you have been using, have some good potting soil, and put the drainage in just as described in the flower article of October, and proceed as there described.

One of the most important things is to

make the plant firm in the pot, and this can only be done by sifting the earth in gradually and then pressing it down carefully; moisten the soil slightly. People are apt to use too much water in transplanting. If the roots are broken in changing be sure to cut back the tops as much or more than the roots have lost. Probably most of the readers of THE AMERICAN FARMER have made preparations for Winter; but if not, it should be done at once. Cover the plants that require protection with leaves, over which must be placed branches of some kind to hold them in place. Evergreens are excellent for this purpose. Dead plants should be taken out of the garden, and not left to disfigure it all Winter. Many allow them to remain until the Spring, expecting then to take everything away; but it is much better to do it in the Fall, making it a point to clean up outdoors at this season just as much as the housekeeper does indoors.

A very pretty way to decorate the mantel for the holidays is to use bright-hued Autumn leaves, which have been preserved, mixing them with the fresh green ones in vases or pots. The pots themselves should be covered with trailing vines or with moss.

A dinner table may also be decorated by running-vines connecting small dishes of flowers. There can be nothing more beautiful than these decorations. Flowers are never out of place when used judiciously. Fancy jardiniere may be always used to hide unsightly pots in which are placed flowers. After the pot is set in one, then vines can be made to run over the edges so as to cover them entirely.

Someone wants to know what to do with the bulbs of tuberoses. It is late now to give directions, but perhaps the knowledge will be useful next year. Before the frost has an opportunity to touch them they should be taken up and put in a paper bag to be hung in a cool, dry place until Spring. No other care is necessary. Of course the attic is a good place, provided it is not so cold as to freeze. In the Spring the young bulbets are to be taken off from the base of the old bulbs and planted in rows in the garden. If they are in good soil, and are taken care of, they will bloom the second year. If blossoms are wanted early they can be set in the house in a warm place and planted out later. They must have plenty of water, warmth, and a rich soil.

For Her Sake.

We wish to call the attention of the readers of the "Farmhouse" to the shopping department of our paper. We have undertaken to furnish to the lady subscribers of THE AMERICAN FARMER dresses, wraps, gloves, children's suits at 40 per cent. cheaper than can be purchased from the ordinary small dealer. We get our goods in large quantities at New York wholesale prices, and give our subscribers the benefit. We have access to all of the big Eastern establishments, and deal in nothing but goods of the latest styles. Absolute satisfaction is guaranteed or money will be refunded.

They Work Like Men.

The peasant women of Russia are all hard workers, says Frank G. Carpenter. You see them everywhere in the fields mowing and reaping, spading up the ground and raking the hay and doing, in fact, everything that man can do. They work in gangs of 20 to 30, and each gang of women is usually directed by a man, who acts as overseer and who keeps them at their work. They go into the fields almost as soon as they are old enough to walk, and they work until they are gray haired. Hard labor soon takes the beauty out of them, and the older women have faces like leather, full of wrinkles and furrowed with care. The young girls are plump, bright-eyed, and, in some cases, pretty. I have seen few beautiful women among them, but there are few very ugly ones. The type of the Russian peasant's face is that of the best type of a kind mother, and the most of the faces show strength of character, and many of them are what you would call fine looking. Marriages among the peasants are made both on the ground of convenience and love. The sexes associate so closely together in their work and in the villages that they have a chance to get thoroughly acquainted with one another, and a good strong woman just doubles the working force of the man who marries her without very materially increasing his expenses. Neither sex among the peasants spends much upon dress. The women wear nothing but handkerchiefs upon their heads while working in the fields, and their feet are generally bare. In the Summer such shoes as they use are made of bark, woven into the form of slippers like basket work, and in the Winter they put great heavy boots of felt upon their feet. Neither sex wear stockings, and they wrap a cotton rag around the foot and up the ankles to about the middle of the calf, tying it round and round with a string. Their dresses are short, and they tuck them up while they are working. They wear little or no underclothes, and their Summer dress consists of this skirt, a chemise and a short sack, which extends only to the waist. Even on fete day their dresses are not very expensive, and a costume consisting of a white chemise cut low at the neck, with long, full sleeves, and dropping down to the knees, with an apron tied over the bust, constitute a woman's outfit. This chemise-like dress is fastened over the bust and under the arms, and is held by braces over the shoulders. The apron is tied around the waist, as well as over the shoulders, and the skirt reaches nearly to the feet. The dress is embroidered with a cross-stitch of red and blue, and the neck above the chemise is often covered with strings of beads.

THE ORCHARD.

Cullings.

Five car loads of Maine apples were lately sold in Chicago at \$3 per barrel. Peach trees and other small fruits which is thought to be too tender to leave unprotected should have a mulch applied to them now, as the ground is in good condition for it.

Water should not be allowed to stand in the orchards. Trees cannot endure cold feet. In level clay soils surface drainage may be provided by well-made furrows in the center between each two rows of trees, but the best way to drain is to lay lines of tiles several feet deep.

Quince trees are often killed outright by the cold of Winter, and if not killed they stand unproductive, a source of disappointment to their owners. The soil should be rich, deep, and kept open and moist, that it may not freeze. Wood ashes are especially good for quince trees.

An ingenious method of protecting orange groves from frost has been adopted by Riverside growers in California. Petroleum is run through pipes laid between the rows of trees, and burnt at equal distances. Clouds of vapor which arise prevent frost in the air. Large vessels of petroleum are used in smaller groves. The cost is estimated at \$10 an acre.

That old story of Horace Greely, when on his farm at Chappaqua, is well known. He offered his guests foreign-grown oranges, together with apples from his own orchard, with the remark: "Take your choice gentlemen; each cost me the same." The abundance of Florida oranges this year, and the dearth of home-grown apples makes the story have a new application.

We may profit by the mistakes of others. A Pennsylvania farmer, in going over the mistakes he has made during the year, says: "Sold our Winter apples too early, and lost 25 cents per bushel. Held our potatoes too long last Spring, and sold for 35 cents, when we could have gotten 50 cents in the Winter. Planted my potato rows three feet apart, leaving too much soil exposed to the hot sun after the weather turned dry. Had better made them two and a half feet and had the vines shade the land."

The grapevine of Mrs. Blanchard, in Canaan, Ore., bore this year about 1,200 pounds of fruit. The Oregon City Enterprise says: "The vine is of enormous proportions. It has a circumference near the ground of 47 inches, and at a height of about a foot divides into two branches, one of which, at the point of division, has a circumference of 37 inches and the other of 25 inches. The two branches together have a length of over 250 feet, and some of the grapes are an inch in diameter. The vine, of the Isabella variety, was budded in 1857 on a California stock by J. P. Blanchard. Wine made from the grapes by Mrs. Blanchard has the flavor of choice port. In the same garden are second-crop Bartlett pears almost ripe."

Grapes.

EDITOR AMERICAN FARMER: The question is often asked among farmers what varieties of grapes are best to grow for home consumption. Among sweet grapes for the table the Delaware and Niagara ranks first, and among the newer sorts the Pocklington comes highly recommended. It resembles in color and flavor the Niagara, but ripens its fruit about a week earlier, making it very desirable for market purposes.

The Lindley and Warden are both desirable colored grapes for home consumption and market, making a succession with the other two varieties. The Warden is a seedling from the Concord, but a thinner skinned, softer grape than its parent, and ripens about 10 days in advance.

The Concord is a standard grape for jelly wine or for shipping purposes. In training vines in the Fall old vines cut out can be made into a pile and burned, and new canes growing next to them stem left, and these cut back to their joint. All those that are of well ripened wood can be cut into suitable lengths, tied together, and packed in boxes filled with damp sand and buried. Early in Spring these can be taken out and planted, where they are to remain, and the grower knows then just what varieties is growing.

Grapes need rich ground and thorough cultivation the same as anything else, and when wires and posts are provided, and the vines well trimmed and cared for, you will be surprised at the small area of ground required to raise several tons of grapes.—MRS. JOHN GAILLARD, Erie County, Pa.

Bark Cleaning.

One time is as good as another for cleaning the bark of fruit trees. Fall or early Winter is usually chosen as being the most convenient season.

Hot slacked lime is applied by means of a stiff broom, and if the wash is made to reach into every crevice there is no chance for an egg or insect to escape. If desirable, the wash may be colored with burnt umber and lampblack, and should be applied again in the Spring.

Valuable Tree Stumps.

The vandal woodcutters in the California sequoia forests used to cut trees at a distance of from 12 to 20 feet above the ground in order to avoid the gnarled and knotted base. But it has lately been found that these stumps are as valuable as the straight wood. The gnarls present most beautiful figurings, and the wood is sawn into thin sheets and used for interior decorations. Now these stumps are being dug out, and soon not even a vestige will remain to show what was the appearance of some of the most majestic natural monuments of this wonderful continent.

THE HOUSEWIFE'S DEPARTMENT.

We offer below a large assortment of household articles for the special benefit of our lady readers. In the preparation of this list we had in view particularly the wants of mothers during the approaching holiday season. We have therefore included a list of gifts for the children, as well as various articles for larger people. In making up the assortment we have expended a great deal of time and pains in the examination of the largest stocks of goods in the New York market. We have thus been able to secure many things not to be found at all in our country stores, and in all cases we have endeavored to have our patrons at least 40 per cent. upon retail prices for the same class of goods.

Everything here offered will be found to be of the very best quality and of the largest value for the respective prices given. It will be noticed that we have given the price and postage separate in the case of everything sent by mail. In those cases where postage is not named, articles will be sent by express to the nearest express office, except where it is stated "postpaid."

In all cases where postage is given our patrons will understand that the article is available, and that we will send it postpaid when the specified postage is inclosed. In the case of these articles we charge nothing for the cost of packing and handling, but simply ask the average postage to reimburse us for the stamps required.

FUR-TRIMMED REEFER



Tailor's cheviot reefer, with full shawl of real coney fur and four coney bead ornaments. Black only; 32 inches long; size 32 to 44, bust measurement. Price, postpaid, \$3.50.

LADIES' READY-MADE SUIT.



Russian blouse suit of domestic camel's hair; waist with Bishop sleeves and bodice belt; waist suit trimmed with Hercules brand; colors, tan, blue, gray, and black. Skirts are 42 inches long, bust measurement 32 to 44 inches. Price, postpaid, \$4.75.

LADIES' TAILOR-MADE SUIT.



Pretty tailor-made suit of all wool, flannel or sackcloth waist, neatly bound with hand, and three rows on skirt; colors tan, blue, gray, and black. Skirts 42 inches long, bust measurement 32 to 44 inches. Price, postpaid, \$4.75.

SPECIAL! SPECIAL!!

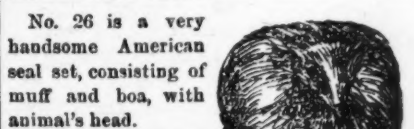


Here is the biggest bargain ever offered, a girl's all-wool blue flannel sailor suit, trimmed with two rows of wide Hercules brand skirt and collar. All sizes, 6, 10, 12, 14 years. Price, postpaid, \$2.25.

LADIES AND MISSES' FURS.



No. 25. Black French half set, consisting of muff and hat; muff handsomely lined with heavy satin; has three yards long. Each set in a neat box. Price, postpaid, \$2.50.

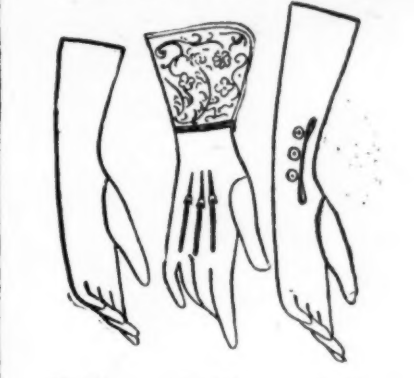


No. 26 is a very handsome American seal set, consisting of muff and hat, with animal's head. Price, postpaid, \$11.50.



No. 27 is a handsome, genuine black Astrakhan set, consisting of muff and collar, with head; muff handsomely lined with satin; collar 29 inches long. Price, postpaid, \$10.

LADIES' GLOVES.



No. 28. Ladies' Blaritz, about length in tan, pearl, English red, brown, slate, and black; good-fitting and durable. Per pair, postpaid, \$1.00. No. 29. Heavy dog skin, ladies' gauntlets, suitable for driving or street wear. Per pair, postpaid, \$1.25. No. 30. Eight-buttoned glove, real kid, mousetail; warranted in any color required. Per pair, \$1.50. Also can furnish any of the light shades with black embroidery or of the same color as glove.



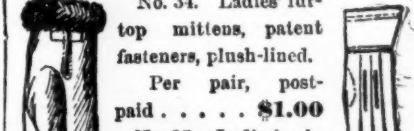
Ladies' 4-button castor undressed gloves in slate, brown, light lemon, and tan; perfect-fitting gloves and durable for wear. Per pair, postpaid, \$1.00.



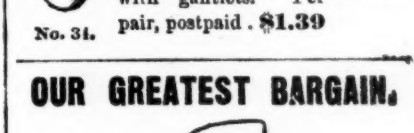
Eight-button mousetail, suede, real kid; warranted; lemon, tan, pearl gray, brown, and black. Per pair, postpaid, \$1.50.



"Our Pauline" glove real kid; warranted. Can furnish 4-button tan in lemon and pearl, with narrow black embroidery, or in gray, brown, or black, with embroidery to match the glove or in contrasting colors. Sizes 5 1/2 to 8. Per pair, postpaid, \$1.40.



No. 34. Ladies' fur-top mittens, patent fasteners, plush-lined. Per pair, postpaid, \$1.00.



No. 35. Ladies' rubber gloves for housework, etc.; best quality, with gauntlets. Per pair, postpaid, \$1.39.



No. 36. Ladies' fur-top mittens, patent fasteners, plush-lined. Per pair, postpaid, \$1.00.



No. 37. Ladies' fur-top mittens, patent fasteners, plush-lined. Per pair, postpaid, \$1.00.



No. 38. Ladies' fur-top mittens, patent fasteners, plush-lined. Per pair, postpaid, \$1.00.



No. 39. Ladies' fur-top mittens, patent fasteners, plush-lined. Per pair, postpaid, \$1.00.



No. 40. Ladies' fur-top mittens, patent fasteners, plush-lined. Per pair, postpaid, \$1.00.



No. 41. Ladies' fur-top mittens, patent fasteners, plush-lined. Per pair, postpaid, \$1.00.



A Tale of Two Cities.



New York. Philadelphia.
—New York Truth.

The Mouth Worker.

The "man with a mouth" may have as much mind as some other people, but he is usually a good deal more economical with it.—*Washington Star.*

With Machine-Like Accuracy.

If you happen to run across a rattle-snake, press the button. The snake will do the rest.—*Atchison Globe.*

This Outragious Tariff.

Mrs. Grayneck—Just read this! A man out in Rochester has had to pay a thousand dollars for kissing a woman.
Grayneck—Well, thank heaven, the McKinley bill will soon be repealed!—*Boston Courier.*

Why He Admired Her.

"Johnny, do you go to school?"
"Yes, sir."
"I suppose you admire your teacher?"
"Yes, sir."
"Why?"
"Cos she can lick me with one hand."

Drawing Conclusions.

Neighbor—And so you have a little baby at your house? Is it a boy or a girl?

Little Boy—Mamma thinks it's a boy, but I guess it'll turn out a girl. It's always crying 'bout nothing.

The Buzzing Bee.

"I wonder what the bees talk about?" said Alice.

"They don't talk, they buzz," said Wallice.

"Then what do they buzz about?" asked Alice.

"About all the time," chuckled Wallice.

An Eye to Business.

Dealer—Say, Sonny, tell your father that I have a new patent lawn-sprinkler I want him to see. The force of the water turns the wheel, and the sprinkler travels all over the lawn.

Sonny—Um—that's good 'nough so far as it goes; but will it push a lawn mower in front of it?

Good Reason.

Mamma—When that boy threw stones at you, why didn't you come and tell me instead of throwing them back?

Little Son—Tell you! Why, you couldn't hit a barn door.—*Good News.*

A Mean Trick on a Friend.

Mr. S.—Toddler is a mean man, that's what Toddler is!

Mrs. S.—Why, what has he ever done to you?

Mr. S.—Bet me \$50 this afternoon that I couldn't hit a barn door with a revolver at five paces. Taunted me into betting him, got me to put up the money, measured off the five paces in the presence of a lot of witnesses, gave me a revolver loaded, and then set the door up edgewise!—*Brooklyn Life.*

The Last Straw.

Schwinger—Blease don't schmell der factory out mid dot fearful cigaret. Get out!—*Judge.*

A Teller of Wondrous Tales.

Mrs. Blue—Don't you think that Edgar Allan Poe had the most brilliant imagination you know of?

Mrs. Green—Oh, no! I'm sure he couldn't compare with my husband when he comes home late.—*New York Herald.*

A Coming Quandary.

Teacher (of class in physics)—Of what is paper now chiefly made?

Pupil—Of wood.

Teacher—Is the world's supply of wood inexhaustible?

Next Pupil—It is not. It is consumed in the arts and manufactures many times faster than it grows.

Teacher—Then, what will the world use for a substitute when the wood is all gone?

Third Pupil—Paper.—*Chicago Tribune.*

SHEEP AND WOOL.

The American Merino Sheep.

(Republished by request.)
The Spanish merino sheep was introduced into the United States during 1802 and 1812. Its popularity was a work of time, but it finally found a universal favor.
Mr. Edwin Hammond, of Vermont, one of the most intelligent and successful breeders of the Spanish merino sheep, so improved the qualities of this breed as to entitle it, by common consent, to the name of the American merino.



In connection with this sketch we present a cut of the merino sheep, which may serve as an object lesson for the student of sheep husbandry in this country. It is a two-year old ram, dropped in the Spring of 1890. This ram may be considered a standard American merino in every respect.
"Two days before he was two years old he weighed 200 pounds, and clipped the same day 41 pounds." He was shorn each year before a committee, and these figures are from the official record.

It will be conceded that the American breeders have made wonderful changes in the merino sheep during the present short century. In the words of a contemporary they are "as far ahead of the original Spanish stock as the Rhode Island Greening or Northern Spy is ahead of the Crab apple." Nor can it be that the work of improvement shall end here. Less than 100 years of breeding has made the American merino the best wool-bearing animal in the world.

The writer who shall chronicle the achievements of the American merino breeders of the next 100 years will present its mutton qualities as surpassing all other breeds as far as it now surpasses all breeds as a wool-bearing animal. The demand was for wool; now it is mainly for mutton. The indications are that the breeders and breeders can meet the demand readily.

Mississippi as a Sheep Country.

Very few places exceed the Mississippi southeast as a natural place for sheep raising. The climate there is admirably adapted for the purpose, and all other things to be taken consideration are as favorable. But with very little expense, outside of the cost of the flock, and the natural advantages offered, an industrious sheepman could not but help making an excellent living.

The sheep in the country at the present time are left to look out for themselves. There are plenty of growing things upon which they obtain a good living, but owing to several causes the sheep do not thrive near so well as they ordinarily would. The winters are very mild, and during the whole year the animals find their own food, and the owners bestow no care whatever on them.

In this unprotected condition the sheep are exposed to various dangers. Dogs are a well known enemy, and in addition to these the sheep have to stand the ravages of wolves and hogs. The hogs eat all young lambs as soon as they are weaned, and belong to the celebrated Southern razor-back family. In addition to this there are frequent periods of cold weather called "northerns," which last sometimes quite long. The sheep being exposed to these sudden changes suffer greatly. If a shed were constructed under which they could take protection one-half the loss the animals now sustain could be averted.

More Sheep, Less Wheat.

Jas. McManis & Co's circular says, in regard to wool: "Very little is coming in. As far as we know the sheared wool has about all been used up by Western manufacturers, or shipped to the East to be stored and sold out to Eastern manufacturers as they require it. As there is so little doing in sheared wool in the West prices are nominal, and will continue so until another clip; but what wool is sold goes at about the same prices as it has during the Fall. The Western farmers are beginning to realize that they should raise more sheep and less wheat. There seems to be an unlimited demand for both stock and fat sheep at high prices compared with the prices of cattle, so that sheep raising is profitable aside from the proceeds of the Wool."

Foes to Sheep.

It is said that about 6 per cent. of the flocks in this country are killed annually by dogs. This sounds exaggerated, but it comes from the Bureau of Animal Industry. This is probably true of the sheep east of the Mississippi, and west of that river more than 6 per cent. are destroyed by wolves and coyotes. In some localities these marauding animals are so troublesome that flockmasters have had to organize for their own protection and offer bounties for the scalp of such beasts. Some States in the East have rigorous dog laws, but they are rarely enforced. The shotgun is the only sure defense.

Feeding in Winter.

Some flockmasters keep their sheep all winter. Others do not begin to feed until February or March. This may be done with success when the hay is grown on yellow-clay uplands, red top, or Kentucky blue grass, but hay grown on a carbonaceous or nitrogenous soil, such as a rich prairie or river bottom, is not nourishing, and grain is needed with it. A little grain given throughout the winter gives the sheep heart and thrift, and it will consume its rough feed with less waste, for it makes a balanced ration with the right proportions of albumenoids and carbohydrates.



Feeding Sheep for Market.

A good grain for fattening sheep is shelled corn, one-half; barley or rye, one-quarter; oats, one-quarter, all by weight—or, still better, substitute one-fourth of the corn with cottonseed meal. To the majority of farmers corn is the most available feed, and corn may be fed to good advantage alone, provided a sufficient amount of cooling and laxative coarse feed is given with it, such as clover hay. After several trials we do not think it is profitable to crush or grind any kind of grain for sheep that are young enough to make good feeders, though it is advisable in the case of old ewes with poor teeth. It is wasteful to throw out corn unhusked. There need be no fear of overfeeding the mutton business. Its consumption is increasing each year, and with the rapidly increasing population the prospects for the mutton raiser are exceedingly bright.

Scouring Wool.

All wool must be scoured before it is spun into yarn. Some manufacturers will accept it in its original state and scour it themselves, and others buy it only after it has been sorted and ready for the carding machine. The scouring is done with a prepared liquid of some material such as soda ash, potash, etc., with salt or soap, put in water. This is heated and the wool allowed to soak thoroughly in it. Then the wool is rinsed and dried by hot air, and is then ready for the card.

Sheep Killed Through Eating Barley.

A remarkable fatality among sheep is reported in the *North British Agriculturist* from Skipton—Storr. Mr. William Bragg, a farmer, put a flock of ewes on a barley stubble on Friday, and on the following Sunday four died, and two more were so bad that they had to be killed. Post mortem examination showed that the cause of the fatality was an accumulation of barley awns in the stomach and intestines of the animals.

Shearings.

A writer draws the fine conclusion that sheep are gleaners on the farm, while to swine, which perform the same duty, the title of scavengers is applied. In our opinion the sheep do better work for the farmer than do the swine, and we think that the terms of the writer are right.

Some of the abandoned farms in Maine were bought by the editors of the *American Wool and Cotton Reporter*, of Boston. They are stocking them with sheep, as an experiment, to find out whether these deserted New England farms may not be made more profitable, and the soil improved by stockraising.

An advantage of sheep over swine is that they can be used as gleaners on the farm. A flock can easily be herded in a meadow with the aid of a coolie, whether there be good fences or not, and without the risk of the damage done when this is attempted with cattle or swine. Sheep and lambs may be trusted in a "laid-by" cornfield, where they will destroy only the late weeds.

The Saltpeeter Remedy.

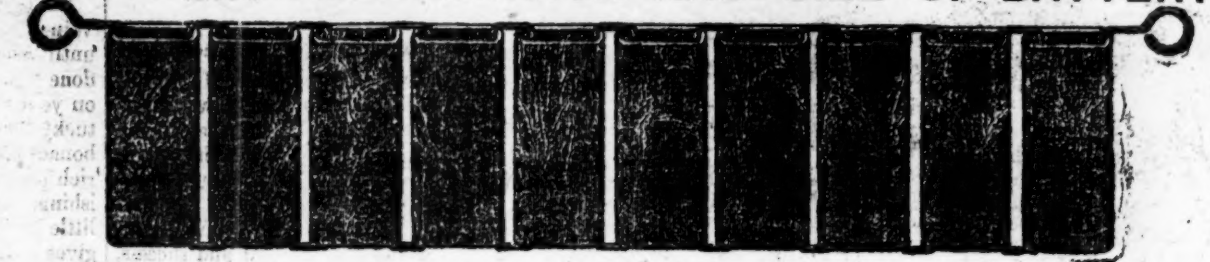
It is not too soon now to begin to think seriously about next year's garden, and it will be well to fix firmly in mind the good that can be done to cucumbers and squashes by pouring into each hill a pint of water from a bucket in which a tablespoonful of saltpeeter has been dissolved. This will be good for the plants, but do not let the bugs which burrow in the ground at night.

Mexico Wants the Emigrants.

It is understood that efforts will be made by the Government and through other agencies to turn the tide of emigration which has been flowing from Europe to the United States into Mexico, in view of the probable passage by the United States Congress of laws further restricting immigration. It is rumored that the authorities of several of the Mexican States are preparing to send emigrant commissioners to Italy, Sweden, Ireland, and Germany.

RUBBER ROOFING.
UNEQUALLED FOR HOUSE, BARN, AND ALL OUT-BUILDINGS. Anybody can put it on. PRICE LOW. Write for sample and Book. 42 West Broadway, New York.
INDIANA PAINT & ROOFING CO.

EXACT REPRESENTATION AND SIZE OF BATTERY



OWEN ELECTRIC BELT.

SPECIALLY RECOMMENDED FOR THE CURE OF ACUTE, CHRONIC, AND NERVOUS DISEASES.

NO DOUBT

More People are Cured of Various Diseases by the Owen Electric Belt than any other Remedy under the Sun

A VALUE PLACED ON THE OWEN ELECTRIC BELT.

PAICORNER, N. Y., March 14, 1892.
The Owen Electric Belt Co.
Gentlemen:—One year ago I was so bad with rheumatism that I could not attend to my business. At two different times I could not turn over in bed. I was very weak, have been so all my life, and tried doctors and everything without any help, but for a short time.

I bought a belt from you for some time, but my friends thought it was too good; but I got so bad that I had to use it, and I have been using it ever since. I have sold ten belts since, and they are all giving good satisfaction as far as I know. I could sell more if I had the time, but I am working every day in our mill, and never get a moment to rest in the past year, and I give the belt to the mill.

Helping me, help anyone who is troubled as I was, I would gladly do so.
Yours truly, L. W. WARREN.

RESCUED FROM THE GRAVE IN THE LAND OF FLOWERS.

HOMERIDGE, Fla., May 9, 1892.
Dr. A. Owen, New York City.
My dear friend: I am just too happy to say to you that your electric treatment with the Owen Electric Belt has about cured me, and has in my case relieved all the medicine of this country, and it may be the same relief from the effects of the long living Summers under a tropical sun in this climate, my nervous system entirely gave away. I was given up to die, not only myself, but everybody else thought so. The only hope I had was beyond the grave. To my great surprise the belt began its wonderful work as soon as I commenced using it. I have experienced with it in every way possible. I wore it on my feet, legs, body, chest, and in a single place where I put it it did not give relief.

I will write you again in a few days a more satisfactory letter.
Yours truly, J. W. SMITH.

LIVER COMPLAINT AND BACKACHE CURED.

ENGLISH LAKE, Ind., April 1, 1892.
Owen Electric Belt and Appliance Co., Chicago, Ill.
GENTLEMEN:—The Owen Electric Belt and Appliance Co. has given perfect satisfaction in every way. It has cured me of liver complaint and backache, of which I have suffered for nearly two years. I can highly recommend the Owen Electric Belt and Appliance.

Yours respectfully, CHAS. F. OVERLY.

Persons making inquiries from writers of testimonials are requested to inclose self-addressed stamped envelope to insure a prompt reply.

Contains full information, list of diseases, cuts of Belts and Appliances, prices, sworn testimonials and portraits of people who have been cured. Published in English, German, Swedish and Norwegian languages. This valuable Catalogue will be sent to any address on receipt of six cents postage.

THE OWEN ELECTRIC BELT AND APPLIANCE CO.,
MAIN OFFICE AND ONLY FACTORY, THE OWEN ELECTRIC BELT BUILDING,
201 TO 211 STATE ST., CHICAGO, ILL.

THE LARGEST ELECTRIC BELT ESTABLISHMENT IN THE WORLD. NEW YORK OFFICE, 826 BROADWAY.
WHEN WRITING MENTION THIS PAPER.

THE GARDEN.

Pluckings.

Potatoes and parsnips may be stored in heaps in the cellar without covering, but beets, without earth or sand, will shrivel.

Store carrots in pits or cellars, and cover the roots with sand to prevent them from wilting.

If celery is put in the cellar some earth should be left on the roots. The roots should be kept moist, and the tops dry and free from frost.

When the weather is mild in winter, lettuce in frames need all the air you can give them, otherwise they will be so tender that the least frost will kill them.

Start beds of mushrooms under greenhouse benches. Cover spinach lightly with litter, and kale in exposed locations should also be covered.

Cabbages in cold frames should be aired freely and kept cool. Heads for winter and spring use must now be protected, but not covered too deeply, nor stored in too warm a place.

A number of authorities believe that the galls on an oak by attracting ants lead to the slaughter of quantities of caterpillars and other insects which are its natural enemies. He illustrates the value of this protection by the statement that the inhabitants of a single ant's nest may destroy in a single day upwards of 100,000 insects.

The New England Farmer says that the strawberry is a hardy plant and not injured by frost. It is the freezing and thawing of early Spring that works the mischief, and the value of a mulch or covering is to keep them frozen. Therefore, do not mulch till the ground is frozen solid in November or December. Old hay, straw, cornstalks, leaves, coarse manure, or old trash of most any sort will answer.

Green House Temperature.

The temperature in a green house when growing lettuce, radishes, dandelions, parsley, and other such hardy plants should be at night from 40° to 50°, and on cloudy days 5° or 10° higher. On clear or bright days it may reach 70° to 75° with good ventilation. It is well known that a plant will stand a higher temperature in bright weather, with long days, than in bad weather and short days. Lettuce will bear a temperature about 10° higher than radishes. The cucumber needs 60° to flourish well. Moisture, insects, and fungus diseases are other considerations next to temperature. Good judgment is required in applying just enough water and at the right time. It is well to water in the morning before the sun gets high, then the leaves can dry off before night, which impedes, if it does not prevent, mildew, moss, and diseases.

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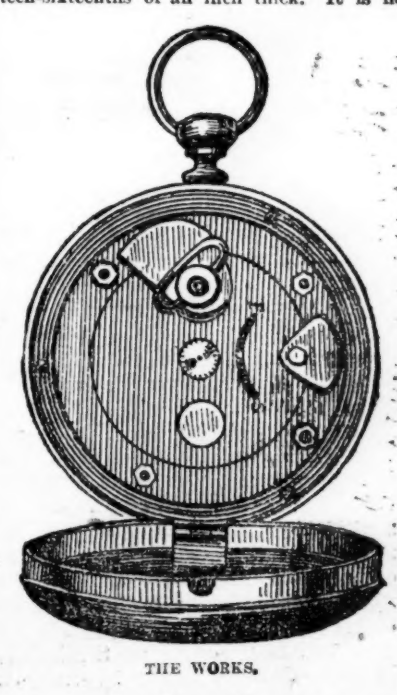
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